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An Intensive Study of Factors Relating to Reading Readiness with Implications for Prediction of Success in the Developmental Reading Program

Janet R. Venatta

AN INTENSIVE STUDY
OF FACTORS RELATING TO READING
READINESS WITH IMPLICATIONS
FOR PREDICTION OF SUCCESS
IN THE DEVELOPMENTAL
READING PROGRAM

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Janet R. Venatta

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Adviser:

Committee:

Dr. William J. Crane
Dr. Walter H. Friedhoff
Dr. Hobart F. Heller
Dr. Donald L. Moler

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CHAPTER I

THE IMPORTANCE OF READING READINESS

The ability to read effectively is requisite to a completeness of present-day living. Educators have recognized the importance of reading ability as the fundamental basis for all learning in life inside the school. The parent becomes disturbed, and with justification, when he discovers his child cannot read. School workers likewise are disturbed over the failure of some children to successfully learn this necessary skill. In studying those children who experience failure in school, it becomes evident that their weakness in the reading skills was present at the primary grade level. Thus, the conclusion is reached, that failure to achieve the basic concepts and skills presented in the initial stages of reading instruction is an important factor contributing to later unsuccessful school experiences. This realization results in emphasis upon reading as the fundamental skill to be taught in the beginning school years. The necessity for insuring successful beginning reading experiences for all children has resulted in the evolution of the concept of reading readiness, or the realization that there are certain basic factors which determine whether or not the child will be successful in the initial reading program.

"As early as 1925, three pertinent facts were clearly recognized; first, that any child who expresses a desire to read at any age does so because of his previous experiences at home and in school; second, that children differ widely in readiness for reading when they enter school, and third, that many of them need further training and experience before systematic effort should be made to teach them to read."¹

Reading readiness is the name given to that stage of development which permits the child to successfully receive instruction in reading. Although the name itself is simple, reading readiness is actually a complex of many variables. It consists of many factors, some of which are intangible, while others are easily identified. Persons who have given a great deal of attention to the problem of reading readiness, and who are recognized authorities on that subject, are in fundamental agreement as to which discrete factors are included in the development of reading readiness.

Harrison¹ states that it is very difficult to determine which single factor is most important in developing readiness for reading. She makes distinction between three types of factors, namely, (1) those which are distinct abilities and which may be observed and measured against clearly defined norms, (2) those which are levels of maturation and development, some of which may be influenced by school, others which are subject only to the child's maturation, and (3) those which are conditions within the child's environment. She classifies these factors as Intellectual Development, Physical Development, and Personal Development.

1. Harrison, M. Lucile, *READING READINESS*, Houghton Mifflin Company, Chicago, 1936, p.5.

2. *Ibid*, pp. 22-23.

Bond³ groups the various factors of reading readiness under four headings. These are (1) mental readiness, (2) physical readiness, (3) personal and emotional readiness, and (4) educational readiness. Hildreth⁴ groups the readiness factors under four headings. She lists the chief factors as mental maturity, perceptual maturity, sensory acuity, and linguistic maturity.

In discussing the factors which influence the development of reading readiness, it is appropriate to consider first a group of factors included under the heading of mental maturity, or mental readiness.

Learning to read, in itself, may be considered to be a test of mental maturity, because it is an abstract skill involving intelligent understanding, the use of language, the ability to correctly interpret meaning, the capacity to associate meaning with words, the ability to anticipate and remember ideas in sequence, the capacity to think logically, and the ability to recall word forms. The ability to remember is also an essential prerequisite in learning to read.

McKee⁵ makes the point that although many people are of the opinion that any child who is six years of age can begin to learn to read, actually it is impossible for a child to learn this complex of abilities until he has acquired sufficient maturity. The child who has not matured in the necessary mental traits cannot master the necessary skills through mere repetition and drill.

3. Bond, Guy L. and Eva, TEACHING THE CHILD TO READ, The Macmillan Company, New York, 1943, pp. 24-25.

4. Hildreth, Gertrude, READINESS FOR SCHOOL BEGINNERS, World Book Company, Yonkers-on-Hudson, New York, 1950, pp. 13-15.

5. McKee, Paul, THE TEACHING OF READING IN THE ELEMENTARY SCHOOL, Houghton, Mifflin Company, Chicago, 1948, pp. 142-143.

Hildreth⁶ states further that the child who has not matured mentally will not be able to give sufficient attention, nor will he have the necessary capacity for perception. The ability to follow directions is also related directly to mental maturation. For a child to profit from instruction in the beginning reading skills, Hildreth indicates that it is necessary that he have reached a sufficient mental age, and that evidence points to the fact that the factor of mental age is related to learning to read. Bond⁷ repeats the frequent reference that a mental age of six years and six months is necessary for the child to have reached sufficient maturity to succeed in reading instruction.

Witty and Kopel⁸ reported from a study they had made, that in their opinion, reading instruction should be delayed until the child's mental growth would enable him to find meaning in the tasks assigned to him, and until the process of growth resulted in a condition in which reversals are few and perception of words and meanings are possible.

Also Witty and Kopel⁹ propose that most children should not receive reading instruction in the actual reading skills until they are approximately eight or nine years old. However, they feel that some children will be capable of successfully receiving reading instruction while in the first grade.

6. Hildreth, Gertrude, READINESS FOR SCHOOL BEGINNERS, p. 13.

7. Bond, Guy L. and Eva, TEACHING THE CHILD TO READ, p. 25.

8. Gray, William, et all, "Reading", REVIEW OF EDUCATIONAL RESEARCH, American Educational Research Association, Washington, D.C., Vol. X, No. 2, April, 1940, p. 84.

9. Ibid., p. 84.

Gates¹⁰ expresses the judgement that the postponement of reading instruction until children are eight or nine years old is not justified. He found that through the use of modern teaching methods, reasonable progress in learning to read could be achieved by children in the first grade. Mental maturation is extremely important in relation to gaining many of the other skills considered in the phrase, "reading readiness".

Hildreth¹¹ states that physical development and condition is of importance in acquiring reading readiness, since a child is much better equipped to learn if he has normal vitality, energy, and the alertness that results from good health. Bond¹² reminds us that a child who is in poor condition physically, usually is quite easily fatigued, and often does not have the energy which is necessary for ample and continued application to a task.

Monroe¹³ cautions that visual difficulties have often been the cause of failure to learn to read. It is necessary that the teacher recognize those children who have defective vision. Also, Monroe¹⁴ states that sufficient development of the nervous system is necessary if the child is to be successful in learning to read. The child's eyes must be developed to the stage where printed symbols can clearly be seen, either in a book or on the blackboard.

10. Ibid., p. 84.

11. Hildreth, Gertrude, READINESS FOR SCHOOL BEGINNERS, P. 17.

12. Bond, Guy L., and Eva, TEACHING THE CHILD TO READ, p. 29.

13. Monroe, Marion, GROWING INTO READING, Scott, Foresman and Company, Chicago, 1951, p. 111.

14. Ibid., p. 143.

The beginning school child has to make new and exacting visual adjustments in preparation for learning to read. It is necessary for him to accustom his eyes to near vision for longer periods. He will be expected to make finer judgements of shape, size, place relationships, and arrangement of visual details. For probably the first time the child will need to direct his eyes from left to right.¹⁵

Auditory development is another important factor in physical readiness. Before children are ready to read they must become familiar with the various qualities of sounds, especially as sounds are related to language.¹⁶ The child who has any sort of hearing defect must have special adjustments if he is to learn. Impairment of hearing usually results in a lack of learning which can be related to failure in learning to read.¹⁷

Although the role of speech defects in causing failure to learn to read is uncertain, it is recognized that when a speech defect is present, some action must be taken to correct the difficulty.¹⁸

In order to successfully learn to read, the child must be able to understand the use of oral language, discriminate between word sounds, distinguish word units, pronounce words correctly while reading orally, discriminate between similar word forms, sit quietly in order to fixate the eyes, move the eyes as required in reading, concentrate on reading for a reasonable length of time, and listen to and follow directions, all of which are directly related to the physical development and condition.

15. Bond, Guy L. and Eva, TEACHING THE CHILD TO READ, pp. 27-28.

16. Hildreth, Gertrude, READINESS FOR SCHOOL BEGINNERS, p. 14.

17. Bond, Guy L. and Eva, TEACHING THE CHILD TO READ, p. 29.

18. Hildreth, Gertrude, READINESS FOR SCHOOL BEGINNERS, p. 251.

19. Ibid., p. 251.

The personal and emotional factors in reading readiness are those which can be related directly to the child's environment. Most of the authorities in this area feel that in order to learn to read, the child must have acquired a broad background of understanding. The beginning school child who has visited many places, has had experiences with pictures and storytelling, is familiar with such articles of expression as crayons, paints, and clay, has a background of experience which will enable him to be more successful in beginning reading than the child who has not had these opportunities.²⁰

Hildreth²¹ lists seven other factors which are important in an adequate background of experience. These seven factors are (1) particular items of information, (2) concepts of space, size, time, and money, (3) facts about animals, people, etc., (4) orientation of time and place, (5) observation of surroundings, (6) experiences away from home, and (7) literacy of parents.

The child who is emotionally immature, or who is insecure for any reason, will not be able to learn to read easily. The child who does not have the ability to pay attention, listen to directions, make plans, participate in group work, and engage in social conversation is not prepared to learn to read. A child who is mature is able to be away from home for several hours without fear, and is able to play cooperatively with other children.²²

20. Ibid., p. 15.

21. Ibid., p. 16.

22. Ibid., p. 17.

Emotionally disturbed children who are pressured to learn to read before they have acquired the necessary attitudes, may identify reading with their emotional disturbances, thereby setting up psychological blocks which may be difficult to overcome.²³

A desire to learn to read is considered to be an important factor in reading readiness. The child who expresses a desire to learn to read does so because of his previous experiences, both at home and in school.²⁴ If a child's desire to read is based on a genuine love of books, and what they contain, the interest is a good indication that he is ready to read. Although the desire to read, of itself, does not insure success in reading, a lack of interest may keep the child from being successful even though he possesses the other qualifications.²⁵

The factors involved in reading readiness are so interwoven that it is rather difficult to isolate them. However, Bond²⁶ lists nine factors which he calls "educational factors", which are fairly typical. These factors are:

1. Backgrounds of understanding
2. Extent of vocabulary
3. Accuracy of speech patterns
4. Quality of oral English
5. Ability to attend
6. Ability to sense a sequence of ideas
7. Ability to follow directions
8. Ability to handle equipment
9. Desire to read.

23. Monroe, Marion, GROWING INTO READING, p. 22.

24. Ibid., p. vii.

25. Hildreth, Gertrude, READINESS FOR SCHOOL BEGINNERS, p. 256.

26. Bond, Guy L. and Eva, TEACHING THE CHILD TO READ, p. 31.

Some children enter school with sufficient ability to enable them to learn to read; other children may be taught to read after a short period of readiness, while still other children may require extensive training in readiness before they are capable of successfully attacking reading instruction.²⁷ Before beginning reading is taught, the teacher should be certain that the child has acquired the necessary readiness factors, or at any rate, that the most important factors are present. Of major importance in successful reading are adequate mental age, good vision, good hearing, emotional stability, and adjustment to the school situation.²⁸ Children who are mature will indicate their readiness for reading by showing interest in hearing stories read, by voluntarily studying pictures and books; by asking the meaning of words and asking to be taught the words; and by following the printed lines on the page as someone reads.²⁹

McKee lists six instructional jobs with which the teacher is concerned in the readiness program, namely, training in auditory discrimination, training in visual discrimination, teaching left-to-right progression, training in the skill of listening, creating a desire to learn to read, and developing concepts and a listening vocabulary.³⁰

27. Ibid., 23-24.

28. Harrison, M. Lucile, *READING READINESS*, pp. 28-30.

29. Hildreth, Gertrude, *READINESS FOR SCHOOL BEGINNERS*, p. 262.

30. McKee, Paul, *THE TEACHING OF READING IN THE ELEMENTARY SCHOOL*, pp. 144-145.

The process of learning to read is one of associating symbols with meanings. Reading is based upon the background of abilities possessed by the child when he begins to read. As there is a wide range of difference in the abilities of beginning school children, developing adequate skill for those children who have not made normal progress, and providing opportunities for growth for all children are necessary objectives of a program for developing reading readiness.³¹

31. Monroe, Marion, GROWING INTO READING, pp. 68-69.

CHAPTER II

INTRODUCTION TO THE STUDY

The recognition of the importance of reading readiness has come to the attention of the test maker. Various tests have been developed for the purpose of determining the degree of readiness of children at their entrance in school. In usual practice these tests are given after the children have had a few weeks to adjust to the school situation, have become familiar with the physical surroundings, and acquainted with their classmates and other personalities associated with the school. The reading-readiness tests are used by the teacher for diagnostic purposes. From studying the scores of the children on each part of the test, she can determine which children need special emphasis on certain of the readiness skills in order to develop readiness for reading. Also, the test scores are often studied, in order to predict the possible reading growth of the children during the first year of school. Experience indicates that generally those children who receive a high score on the readiness test will have achieved a higher level of growth by the end of the year, than will those who have received a low readiness score. Possibly the reason for this is that those children who show a high degree of readiness will be able to begin reading instruction earlier than those who show a low degree of readiness.

For many years it has been observed that some children, upon entering school, are able to meet the demands of the initial stage of reading instruction with success, while others have had a great deal of trouble in mastering the skills in beginning reading. Primary teachers, working with these children, are sensitive to the need for the development of valid readiness tests to serve as reliable prediction devices of future growth in reading. Several studies provide the evidence to substantiate the significance of the concept of reading readiness, and to evaluate the worth of reading readiness tests in predicting possible reading growth during the first year of school.

Monroe³² presented evidence from a study of the records of 85 six-year-old children in four 1b grades. She found that the correlation between reading achievement near the end of the year and the total score on the Monroe Reading Aptitude Tests was .75. Predictive value was greatest, she found, in the classes which had received the most effective teaching. These children, as a group, also made the greatest average gain in reading.

Wright³³ published a report on a study in which he had compared five predictive measures with success in reading. His was a two-year study, involving approximately 400 beginning first-grade pupils. He used the Metropolitan Readiness Test, a pupil rating

32. Monroe, Marion, "Reading Aptitude Tests for the Prediction of Success and Failure in Beginning Reading," EDUCATION, The Palmer Company, Boston, Vol. 56, Sept. 1935, pp. 7-14.

33. Gray, William S., REVIEW OF EDUCATIONAL RESEARCH, Vol. VII, No. 5, December 1937, pp. 494-495.

scale by which the pupils were rated by their teachers, the Detroit First-Grade Intelligence Test, The Lee-Clark Reading Readiness Test, and chronological age.

His results showed that all measures, with the exception of chronological age, correlated significantly with reading achievement. He found that the pupil rating scale and the Metropolitan Readiness Test produced the highest correlations.

Grant³⁴ conducted a study in which he compared the predictive value of the Metropolitan Readiness Test with the Pintner-Cunningham Primary Mental Test. He used 260 first-graders as subjects. Two years after these first two measures were administered, the Gates Primary Reading Test was given. The children who made perfect scores on this measure were given the Metropolitan Achievement Test in Reading, and in some cases, the DeVault Primary Reading Test. His results indicate that the Metropolitan Readiness Test measures factors which are significantly related to later success in reading, and that it is on a par with the Pintner-Cunningham Primary Mental Test in providing a basis for predicting reading success.

Max S. Henig³⁵ conducted a study comparing the Lee-Clark Reading Readiness Test with experienced teacher's opinions to determine the value of each as predictive devices regarding the

34. Grant, Albert, "Comparison of the Metropolitan Readiness Test and the Pintner-Cunningham Primary Mental Test"., ELEMENTARY SCHOOL JOURNAL, University of Chicago, Chicago, Vol. 38, Oct. 1937, pp. 118-126.

35. Henig, Max S., ELEMENTARY SCHOOL JOURNAL, Vol. 1, Sept. 1949, pp. 41-46.

reading growth of children during the first year of school. He used teacher's marks as indications of reading achievement. He found both measures to be of significance in predicting reading growth.

Selma Herr³⁶ found a correlation of .904 between the scores obtained on the Metropolitan Readiness Test and the Primary Battery of the Metropolitan Achievement Tests, in a study she conducted.

Kottmeyer³⁷ reports a correlation of .77 between teacher judgement of readiness to read and reading achievement based on the Gates Primary Reading Test; a correlation of .71 between the scores from the readiness test and those from the Gates Primary Reading Test; and a correlation of .60 between the scores from the Detroit First-Grade Intelligence Test and reading achievement.

Lee, Clark, and Lee,³⁸ when determining the validity of the Lee-Clark Reading Readiness Test, found a correlation of .49 between the readiness test and the Lee-Clark Primer Test; .40 between the readiness test and the Detroit First-Grade Intelligence Test; .54 between the readiness test and the Gates Primary Reading Test; and .39 between the readiness test and the Pintner-Cunningham

36. Herr, Selma E., "Effect of Pre-First-Grade Training upon the Reading Readiness and Reading Achievement Among Spanish-American Children", JOURNAL OF EDUCATIONAL PSYCHOLOGY, Warwick and York, Baltimore, Md., Vol. 31, Dec. 1940, pp. 653-664.

37. Kottmeyer, William, "Readiness for Reading", ELEMENTARY ENGLISH REVIEW, National Council of Teachers of English, Chicago, No. 24, Oct., 1947, pp. 355-358.

38. Lee, J. Murray, Clark, Willis W., and Lee, Dorris May, "An Experimental Study of Certain Factors Influencing Reading Readiness", ELEMENTARY SCHOOL JOURNAL, Vol. 34, May 1934, pp. 656-66.

Primary Mental Test. From their results they express the opinion that the teacher, the percentage of failure, the teaching methods, and the types of learning activities, all affect the extent to which possible reading growth can be predicted.

Petty³⁹ conducted a study using 102 first graders as subjects in which the Harrington Revision of the Binet-Simon Test was used as a measure of intelligence; Peck and Manuel's Non-Language Prediction Test for Young Children, and the Lee-Clark Reading Readiness Test were the other measures used. Teacher's marks were used as an indication of reading growth. Although her results indicated fairly significant relationships between the predictive devices and reading achievement, it was also indicated that home, social, health, disciplinary, or personality problems affect the reading growth of children.

Carr and Michaels⁴⁰ state that they have discovered teacher's observations to be just as useful as reading readiness tests in predicting possible reading growth. They express the opinion that reading-readiness tests will have to become more accurate measures before they will be definitely superior to intelligent observation and judgement by the teacher.

In considering the value of the reading-readiness test as a predictive device, it must be kept in mind that there are many factors to be considered, which cause variation in the findings

39. Petty, Mary Clare, JOURNAL OF EDUCATIONAL PSYCHOLOGY, Vol. 30, March 1939, pp. 215-228.

40. Carr, John and Michaels, Matilda, ELEMENTARY ENGLISH REVIEW, Vol. VIII, April 1941, pp. 133-138.

of research. Hildreth⁴¹ observes that the correlations are usually higher when the readiness test and the achievement test used were developed by the same author. Also, the prediction of reading growth depends upon the teacher, the teaching methods, and how reading is taught.

Fendrick and McGlade⁴² express the opinion that readiness tests add little to intelligence tests as predictive measures, and Gates⁴³ says that the teacher will profit from reading-readiness tests if he concerns himself with the pupils' status in each test given, then arranges his work to conform to it. Test results should not be followed blindly; all of the factors influencing reading growth should be considered when predicting possible reading achievement of first graders.

In spite of the lack of uniformity in results of various studies, the reality of the existence of reading readiness is the established fact. Too, the importance of an adequate readiness in meeting the initial demands of the basal reading program cannot be denied. The improvement of techniques and devices for determining reading readiness to the end that better prediction of success may be achieved is the challenge issued to all workers in education. It is in answer to this challenge that the writer seeks to make a contribution.

42. Fendrick, Paul and McGlade, Charles, ELEMENTARY SCHOOL JOURNAL, Vol. 39, Nov., 1938, pp. 187-94.

43. Gray, William, REVIEW OF EDUCATIONAL RESEARCH, Vol. VII, No. 5, Dec., 1937, pp. 494-495.

CHAPTER III

PURPOSE AND PROCEDURE

The Problem

The purpose of this paper is to review the reading readiness problem with special reference to its importance as a determinant at entrance to first grade. A number of studies relating to the readiness problem have been discussed in the preceding pages. The study which is to be reported upon here is the result of the interest, on the part of the author, in matters of reading readiness and the factors related to readiness. This is the report of a study of a sample of first-grade children in the Danville, Illinois Public Schools, with reference to those factors which relate to reading readiness and growth, specifically, chronological age, mental age, I.Q., and reading readiness as indicated by test scores. Also contained in the study are the case-analyses of twenty-two selected children, with particular reference to the inter-relationship of the reading readiness factors, gathered from objective data, combined with social and emotional factors, gathered from anecdotal evidence, subjectively interpreted.

The Population of the Study

The test data for this study was collected during the school year 1954-55. A group of 100 children, drawn from the enrollment of the first grades of the Grant, Daniel, and Lincoln Schools comprised the population from which the data was collected for this study. These schools were selected because the first-grade teachers showed a willingness to cooperate in the collection of the data. The sample includes children who were enrolled in five first-grade classes within these schools, and indicates the growth of those children who were enrolled, who are enrolled now, and who will be enrolled in these schools in the future, provided the population, teachers, and the conditions in the area remain the same. The group, in economic status, extends from the upper-middle level to an extremely low economic level. The majority are children of factory laborers. In many cases, both parents work, and in a substantial number of cases, the children do not live with both parents, or are living with foster parents, as a result of death, divorce, or abandonment.

Materials

The Harrison-Stroud Reading Readiness Tests:*

The Harrison-Stroud Reading Readiness Tests were used to determine readiness for reading. The test is published in three separate booklets. In administering the tests, the children are directed to draw a line under a word or picture, or to draw a line from one word or picture to another.

The Harrison-Stroud Reading Readiness Battery is designed to evaluate some of the specific abilities and skills that children use in beginning reading. The battery consists of the following group tests:

- I. Making Visual Discriminations
 - a. Attention Span Controlled
 - b. Attention Span Uncontrolled
- II. Using the Context
- III. Making Auditory Discriminations
- IV. Using Context and Auditory Clues
- V. Using Symbols.

In tests II, III, IV, and V, it is necessary that the children have some skill in using pictures. Some degree of ability in the use of listening skills is required in following the directions for all the tests. The examination of detailed pictures and word forms proceeds from left-to-right in all the tests, therefore, three specific skills are indirectly evaluated in tests which measure other skills directly. The three skills which are measured indirectly are (1) using pictures, (2) listening skills, and (3) left-to-right progression.

In test V, the pupil's skill in making necessary associations to relate a symbol to the idea or things for which it stands, is measured. According to the test manual, Test V, was added to the others because it would give information of value in determining the readiness of a child to use a sight vocabulary effectively in meaningful reading.

* A copy of this test is included in the Appendix.

The Harrison-Stroud Reading Readiness Test was published in 1949. This test, developed by M. Lucile Harrison and James B. Stroud, is designed to serve three functions. These three basic functions are:

1. to determine whether the specific readiness skills are sufficiently well developed so that the pupil can profitably enter the initial period of reading instruction, using any modern reading series,
2. to determine in what group in the first grade the pupil should be placed for instruction, and
3. to find in which of the skills the pupil must have further training before or during the initial reading period.

According to the authors, this test gives indication of the extent to which the child has mastery of those specific skills he needs for learning to read. No provision is made for averaging the scores received on the various tests. Each child is given a percentile ranking for each of the five tests of the series; when the scores for the series are tabulated, each child is classified according to the percentile rankings he received. Five classifications into which the children are placed have been set up. These are:

- | | | |
|------|------|---|
| Type | I: | Percentile rank of 75 or above in all the tests |
| Type | II: | Percentile rank of 50 or above in all the tests |
| Type | III: | Percentile rank of 50 or above in all but one or two of the tests |
| Type | IV: | Percentile rank of 50 or above in only one or two of the tests |
| Type | V: | Percentile rank of 25 or below in three or more of the tests. |

For each classification, the authors make certain recommendations, as indicated below.

- Type I: The child shall be placed with a group of pupils who will require no special instruction in any of the specific skills tested, other than that which will follow in the regular program of reading instruction.
- Type II: The pupil shall be placed in a group where he can receive further training in those skills for which his percentile score is below 75.
- Type III: The only distinction between Types II and III, is in the amount of emphasis in those skills in which the child ranked below the 50th percentile.
- Type IV: This pupil shall have an extended readiness program in a non-reading group within the first grade.
- Type V: This pupil should have another whole year of readiness instruction.

The California Test of Mental Maturity:*

The California Test of Mental Maturity (Short Form) was administered to the group. This battery consists of seven group tests. Tests 1, 2, and 3 are concerned with abilities not related to language; from the total scores on these three tests it is possible to determine a mental age for non-language factors. Tests 4, 5, 6, and 7 measure abilities which are related to language; from the total scores on these tests, it is possible to determine a mental age for language factors. An I.Q. can be determined by using the data obtained from the entire test.

* A copy of this test is included in the Appendix.

The Gates Primary Reading Test:*

The Gates Primary Reading Test was administered to measure reading growth achieved. This test measures three important aspects of reading at the early primary stage, namely, word recognition, sentence reading, and paragraph reading. This test was developed by Arthur I. Gates, and, according to the author, primarily for diagnostic purposes in order to indicate the type of training needed by the individual child. The test is published in three booklets, each of which measures a different phase of reading ability. These are:

- Type I. Word Recognition: This test is designed to sample the ability to read words representative of the primary vocabulary.
- Type II. Sentence Reading: This test measures the ability to read sentences of increasing length and complexity.
- Type III. Paragraph Reading: This test requires the reading and understanding of paragraphs, except the first exercises, which are single sentences.

These tests are designed to measure general competence or power in each of the three aspects of reading described. Since the time allowed for each test is generous, the tests are not rate tests; they are primarily tests of the range, accuracy, and level or power of reading ability. Since speed is correlated positively with range, accuracy, and power of reading, the tests tend to measure speed in some degree. The raw scores obtained on this test may be transposed into reading grade-levels.

* A copy of this test is included in the appendix.

Procedure

No particular method of selection was used in determining which children from the first-grades of the Danville Public Schools should be included in the study. The language arts supervisor contacted various first-grade teachers, and those in the Daniel, McKinley, Lincoln, and Grant Schools were willing to give the necessary tests. Tests at the start of the study were given to 150 children, but complete data is available on only 100 children who completed the final stages of the study. Some children were out of school when some tests were given, other children left school during the progress of the study.

In October, 1954, the Harrison-Stroud Reading Readiness Tests were administered to the group. This was done at a certain time in conjunction with the reading readiness program carried out in the Danville Public Schools. At the time the tests were administered, the children were to be found in all stages of readiness development, a normal condition which could be expected of any group. Some of the children were well advanced in the readiness program, others were still in the early stages of readiness.

In February, 1955, the California Test of Mental Maturity was administered. This test, also, was given as part of the regular testing program carried on in the schools. The data from this test were then recorded as part of the necessary information for the study.

In May, 1955, the Gates Primary Reading Test was administered. These tests, along with the scores for each child, were then sent to the author for use in the study.

In administering all except the Gates Primary Reading Test, the children were tested in groups not to exceed fifteen in number. The Gates Test was administered to all pupils in the room at one time. The teachers administered each of the tests. The Harrison-Stroud Test and the California Mental Maturity Test were administered at one sitting, taking 1/2 day for each test. The Gates Test was given in three different sittings, on three consecutive days. However, no attempt was made to control the time of administering this test. Observation of the children for the case-study analysis was attempted only for that portion of the sample which was attending the Grant Elementary School.

Of this part of the total sample of children which were under study, 44 were present at various times of the year. However, transiency and illness removed half of the group so that complete data were available on only 22. These 22 children were studied with regard to any social and emotional factors which might influence their reading growth. The home situation of each of these children was considered, as well as the influence of physical factors which may have affected progress in reading. From the information gathered from an analysis of this limited sample, the author has attempted to determine to what extent personal and emotional factors influence reading readiness and growth.

The following chapter will present the results obtained from this study.

CHAPTER IV

RESULTS

The tabulated data collected for this study is presented in the master table (Table I) which follows on the next pages. Information is presented for the 100 first-grade pupils for whom the data is complete. In columnar fashion, starting at the extreme left, the headings are read as follows:

1. Name
2. School
3. Chronological age
4. Mental age
5. I.Q.
6. Total score on Harrison-Stroud
Reading Readiness Tests
 7. Score, Test Ia
 8. Score, Test Ib
 9. Score, Test II
 10. Score, Test III
 11. Score, Test IV
 12. Score, Test V
 13. Classification
14. Total score on Gates Primary
Reading Tests
 15. Test I, Word Recognition
 16. Test II, Sentence Reading
 17. Test III, Paragraph Reading

The centile ranks for each section of the Harrison-Stroud Reading Readiness Test may be obtained by consulting the table on page 8 of the manual of directions for administering the tests. This manual appears in the Appendix.

The table is to be read as follows: C. W., a pupil at Daniel School, is 94 months old, has a mental age of 93 months, and has an I.Q. of 98. She received a total score of 90 on the Harrison-Stroud Reading Readiness Tests; she scored 14 on Test Ia; 15 on Test Ib; 17 on Test II; 13 on Test III; 14 on Test IV; and 18 on Test V. She was classified as Type II. Her total score on the Gates Primary Reading Test was 73. She scored 28 on Test I; 31 on Test II; and 14 on Test III.

The fifth child, M. P., is a pupil at Daniel School. He has a chronological age of 93 months, a mental age of 95 months, and an I.Q. of 102. He received a total score of 91 on the Harrison-Stroud Reading Readiness Test, with a score of 13 on Test Ia; 15 on Test Ib; 17 on Test II; 14 on Test III; 14 on Test IV; and 18 on Test V. He was classified as Type II. His total score on the Gates Primary Reading Test was 67; he scored 24 on Test I; 21 on Test II; and 22 on Test III.

The twelfth child, N. W., is a pupil at Grant School. She has a chronological age of 86 months, a mental age of 87 months, and an I.Q. of 101. Her total score on the Harrison-Stroud Reading Readiness Tests was 65; she scored 10 on Test Ia; 7 on Test Ib; 16 on Test II; 7 on Test III; 9 on Test IV; and 16 on Test V. She was classified as Type V. Her total score on the Gates Primary Reading Test was 36. She scored 8 on Test I; 20 on Test II; and 8 on Test III.

MASTER TABLE OF DATA COLLECTED FOR THE STUDY
THE CHILDREN ARE LISTED ACCORDING TO CHRONOLOGICAL AGE

Name	School	Chronological Age	Mental Age	I.Q.	Harrison-Stroud Reading-Readiness Tests							Gates Primary Reading Tests				
					Total Score	Ia	Ib	II	III	IV	V	Classification	Total Score	I	II	III
C. W.	L	94	92	98	90	14	15	17	13	14	18	2	73	28	31	14
J. C.	L	94	99	105	88	11	15	17	14	16	15	3	31	5	21	5
S. H.	D	93	91	84	85	12	15	15	12	13	18	3	59	27	36	16
J. M.	D	93	104	111	85	14	13	16	13	11	18	3	51	15	23	13
M. P.	D	93	95	102	91	13	15	17	14	14	18	2	67	24	21	22
S. T.	D	92	113	121	91	12	15	15	14	17	18	3	75	31	26	19
G. S.	D	91	81	89	91	11	14	17	14	17	18	3	60	22	27	11
J. R.	L	90	97	107	85	14	15	17	10	11	18	4	59	22	27	10
M. P.	D	89	71	80	76	12	12	14	12	8	18	4	43	10	22	11
D. W.	D	88	76	86	75	14	13	15	7	8	16	4	61	20	26	15
L. L.	D	87	90	103	84	14	15	12	12	17	14	3	61	20	23	18
N. W.	G	86	87	101	65	10	7	16	7	9	16	5	36	8	20	8
J. C.	G	86	86	100	67	12	6	13	8	10	18	4	5	1	3	1
D. W.	L	86	83	97	85	14	15	16	11	11	18	3	75	36	25	14
L. S.	D	86	86	100	74	12	14	15	8	10	16	4	54	20	22	12
J. D.	D	85	110	125	93	13	13	17	15	17	18	3	79	32	29	18
E. S.	D	85	87	102	83	13	14	15	11	11	18	3	40	11	23	6
V. B.	G	84	77	92	79	14	12	16	14	15	8	3	55	17	28	10
T. G.	D	84	71	84	69	11	13	14	10	6	15	5	38	15	15	8
M. H.	D	83	75	90	46	5	7	10	6	6	12	5	28	2	15	11
J. F.	D	83	101	122	86	13	13	16	12	14	18	3	69	26	27	16
R. R.	D	83	105	126	91	14	13	16	14	17	17	3	97	42	30	25
J. B.	G	82	68	83	68	13	14	6	13	9	13	4	36	10	21	5
L. B.	G	82	87	105	88	13	12	14	15	16	18	3	45	14	22	9
M. D.	D	82	93	114	76	11	14	16	12	7	16	3	71	26	26	19

MASTER TABLE OF DATA COLLECTED FOR THE STUDY
(CONTINUED FROM PRECEDING PAGE)

Name	School	Chronological Age	Mental Age	I.Q.	Harrison - Stroud										Gates		
					Reading-Readiness Tests										Primary Reading Test		
					Total Score	Ia	Ib	II	III	IV	V	Classification	Total Score	I	II	III	
D. M.	L	82	89	108	85	11	12	16	13	15	18	3	87	32	30	25	
W. B.	D	82	78	95	74	11	10	15	9	11	18	4	29	2	16	11	
J. Z.	D	82	81	99	79	12	10	16	14	13	14	3	91	30	34	17	
L. V.	D	82	90	110	81	14	14	15	13	13	12	3	83	32	29	22	
J. M.	D	82	84	102	93	14	15	14	15	17	18	3	101	38	39	24	
D. L.	D	81	77	95	76	13	6	17	12	10	18	3	58	16	29	13	
D. S.	D	81	75	93	64	10	12	11	4	10	17	5	45	15	19	11	
C. J.	D	81	76	94	69	7	11	13	11	15	12	5	45	16	16	13	
D. D.	D	81	104	126	101	12	14	16	14	17	18	3	87	35	33	19	
R. K.	D	81	93	115	86	14	13	16	11	17	15	3	63	24	23	16	
L. W.	D	81	101	125	72	8	10	14	13	11	16	5	65	32	19	14	
F. W.	D	81	86	106	70	12	12	11	9	12	14	5	73	26	27	20	
L. O.	G	81	87	108	93	13	14	17	15	17	15	2	57	21	25	11	
C. O.	G	81	93	115	90	14	14	17	13	16	16	3	45	16	19	11	
J. B.	G	81	68	84	54	0	12	16	8	10	8	4	9	0	6	3	
C. S.	D	80	98	122	80	13	14	15	10	10	18	3	84	35	28	21	
M. B.	L	80	77	96	64	13	5	15	9	8	15	4	55	23	21	11	
R. R.	D	79	98	124	85	13	13	16	13	14	16	3	66	24	23	19	
S. W.	G	79	81	102	86	13	15	14	14	14	16	3	47	21	18	8	
R. G.	D	79	98	123	75	11	12	16	9	11	16	4	40	17	9	14	
J. T.	L	79	98	124	84	13	14	16	10	13	18	3	64	23	35	16	
M. G.	L	79	84	106	85	14	14	16	11	14	16	3	91	36	36	19	
S. V.	D	79	104	132	89	14	13	17	14	17	14	3	93	40	32	24	
M. S.	L	78	90	116	78	13	14	14	12	9	16	4	55	19	22	14	
R. R.	L	78	76	98	79	14	15	17	10	8	15	4	56	23	24	9	
L. B.	D	78	98	126	87	10	15	16	14	15	17	3	61	24	23	14	

MASTER TABLE OF DATA COLLECTED FOR THE STUDY
(CONTINUED FROM PRECEDING PAGE)

Name	School	Chronological Age	Mental Age	I.Q.	Harrison - Stroud Reading Readiness Tests										Gates Primary Reading Tests		
					Total Score	Ia	Ib	II	III	IV	V	classification	Total Score	I	II	III	
R. J.	D	78	91	117	86	13	15	16	11	17	14	3	57	12	30	15	
L. B.	D	78	79	101	74	14	13	14	10	8	15	5	55	21	21	13	
O. M.	D	78	83	107	77	12	15	15	9	11	15	4	82	29	31	22	
J. T.	G	78	69	88	47	6	3	11	6	11	10	5	12	0	6	6	
J. L.	G	77	51	65	42	1	0	13	10	5	13	5	10	0	8	2	
S. K.	G	77	80	104	78	14	12	16	12	8	16	3	28	7	15	6	
J. H.	D	77	85	111	75	6	7	16	15	16	15	4	43	11	19	13	
L. Y.	L	77	90	117	83	13	15	16	12	13	14	3	62	22	25	15	
S. S.	L	77	84	109	73	14	15	13	11	11	9	4	56	17	30	9	
M. C.	L	77	101	133	80	13	14	17	15	14	17	2	61	26	21	14	
J. S.	L	76	87	115	62	14	15	16	9	12	16	3	85	40	27	18	
T. W.	D	76	66	87	40	6	5	13	8	4	8	5	26	3	10	13	
R. F.	D	76	79	104	80	11	13	17	14	13	12	3	70	30	25	15	
M. S.	G	76	81	106	57	8	11	15	9	10	4	5	10	2	6	2	
D. C.	G	76	74	97	77	14	13	15	7	11	17	4	49	20	10	11	
T. H.	G	76	86	113	83	14	14	15	11	12	17	3	57	16	25	16	
R. P.	D	75	98	131	89	12	15	16	15	17	14	3	85	33	30	22	
K. C.	D	75	69	93	51	4	12	12	4	8	11	5	14	0	9	5	
T. L.	D	75	71	94	65	10	12	13	7	10	13	5	22	8	7	7	
P. Z.	G	75	75	100	76	13	14	14	7	11	17	4	45	22	15	8	
H. S.	D	75	84	112	83	13	14	15	11	11	18	3	65	30	20	15	
D. H.	D	75	79	106	65	8	7	15	10	9	16	5	60	23	25	12	
T. H.	D	75	61	81	55	9	10	15	8	8	5	5	16	6	6	4	
D. M.	D	74	60	83	61	8	9	15	7	9	13	5	20	4	8	8	
W. K.	D	74	78	106	75	12	13	15	9	8	18	4	69	24	25	20	

MASTER TABLE OF DATA COLLECTED FOR THE STUDY
(CONTINUED FROM PRECEDING PAGE)

Name	School	Chronological Age	Mental Age	I.Q.	Harrison-Stroud Reading-Readiness Tests							classification	Gates Primary Reading Tests			
					Total Score	Ia	Ib	II	III	IV	V		Total Score	I	II	III
D. A.	D	74	86	116	86	13	10	16	15	14	18	3	71	23	29	20
J. J.	D	74	81	110	75	10	13	16	8	10	18	4	57	21	23	13
L. B.	D	74	76	103	64	8	6	15	12	11	12	5	70	24	28	18
M. C.	G	74	75	101	89	14	15	16	11	15	18	2	71	31	28	12
J. B.	G	74	85	115	87	14	13	16	14	12	18	3	64	27	26	11
T. V.	D	73	86	118	90	12	15	16	15	17	15	3	58	22	18	18
D. H.	D	73	86	118	70	12	12	15	12	7	12	5	75	34	25	16
T. B.	D	73	72	98	60	6	7	14	8	11	14	5	61	25	23	13
C. N.	G	73	55	75	46	11	5	6	6	6	8	5	17	3	10	4
D. P.	D	73	82	112	81	11	14	14	14	14	14	3	55	23	22	10
W. W.	D	73	75	103	70	14	13	13	6	11	13	5	75	27	33	15
H. P.	G	72	64	89	50	7	6	12	8	10	7	5	11	0	5	6
B. P.	D	72	76	106	65	10	12	15	10	10	8	5	22	0	12	10
V. N.	D	72	74	102	70	13	12	15	10	8	12	5	66	24	26	16
E. T.	L	72	97	135	88	14	12	14	15	16	17	3	91	39	31	21
M. D.	L	72	113	157	89	14	14	17	13	15	16	3	87	35	30	22
E. T.	L	72	77	135	85	14	15	16	11	13	16	3	89	37	30	22
C. B.	D	72	90	125	94	14	14	16	15	17	18	2	93	37	33	23
R. C.	D	72	91	127	79	13	13	16	11	8	18	3	90	32	36	22
V. P.	G	71	92	130	89	12	13	17	14	15	18	3	65	29	20	16
W. H.	G	71	84	119	79	13	12	16	14	8	16	3	36	16	14	6
D. C.	G	71	90	127	71	14	13	16	14	13	1	3	17	5	9	3
L. W.	D	71	77	108	74	12	15	14	11	14	8	3	18	6	8	4
D. H.	D	71	79	111	82	10	14	17	9	14	18	3	67	28	25	14

Table II

	Range	Mean	Standard Error of Mean σ_m	Standard Deviation σ_x	Standard Error of Standard Deviation σ_σ
C. A.	94-71	79.11	.56	5.91	.42
M. A.	113-50	84.26	1.18	11.74	.83
I. Q.	157-65	106.91	1.54	15.29	1.08
R. R.	101-40	76.77	1.27	12.65	.90
Word Recog- nition	42-0	20.53	2.43	24.08	1.71
Sent- ence Reading	39-3	23.00	1.21	11.94	.85
Para- graph Reading	25-1	34.10	.84	8.31	.59
R. A.	101-5	56.51	2.15	21.30	1.51

In Table II, above, the range, mean, and standard deviation for each of the variables is shown. The standard error of the mean and standard deviation are also shown. The standard error indicates that if future samples of the same size were taken from the same population, in the same manner, we would expect that, in 997 cases out of 1000, the true mean or deviation would be contained within the limits of $\pm 3\sigma$ of the mean or deviation obtained for this

Reference to Table II reveals that the mean or average chronological age for this sample is 79.11. If the distribution were normal, 68.27% of the ages would fall within the limits of ± 5.91 from the mean. In this sample, 70% of the ages fall within these limits, or between the limits of 73.20-85.01. This indicates that this distribution, although somewhat symmetrical, does deviate slightly from the normal. The distribution of each of the variables shows this slight deviation. Seventy percent of the I.Q.'s fall within the limits of $\pm 1\sigma_x$ from the mean; seventy-six percent of the reading readiness scores fall within $\pm 1\sigma_x$ from the mean, and 63% of the scores obtained from the Gates Primary Reading Test fall within $\pm 1\sigma_x$ from the mean. The factor which shows a definite influence upon each of the variables is the number of over-age children who were included in the group. The policy in the Danville Public Schools of retaining those pupils who have not achieved sufficient growth, resulted in 23 of the 100 children being older than we would normally expect to find in a group of first-grade children.

In Table III, on the following page, the coefficient of correlation between pairs of the variables is shown. The Product-Moment Formula for Ungrouped Data⁴⁴ was used to compute the correlation coefficients. Reference to the table indicates a coefficient of $.27 \pm .095$ between chronological age and reading readiness. This indicates a low, positive correlation; however, the size of the σ_x indicates that we should have little confidence in this as the range included in $\pm 3\sigma_x$ indicates that in a sample such as this, the coefficient could fall anywhere between the limits of $-.02 - + .55$.

44. Blair, Morris, ELEMENTARY STATISTICS, Henry Holt and Co., New York, 1944, p. 277.

Table III

	Reading Readiness	Reading Achievement
C. A.	r. .27 <i>Or</i> .095	r. -.111 <i>Or</i> .102
M. A.	r. .93 <i>Or</i> .087	r. .50 <i>Or</i> .099
I. Q.		r. .28 <i>Or</i> .084
R. R.		r. .82 <i>Or</i> .033

Chronological age and reading achievement have a correlation coefficient of $-.111$ which indicates that the relationship between the two variables is insignificant. This concurs with results obtained by Wright (13) from a study in which he attempted to determine the significance of chronological age as a factor in predicting possible reading growth. The systematic influence of the over-age, low mental ability group shows up in this correlation, causing it to be negative.

The correlation coefficient $.50$ between mental age and reading achievement indicates that the relationship is significant, however, it is lower than the correlation found by Kottmeyer(16) between the scores from the Detroit First-Grade Intelligence Test and reading achievement. This too may be a result of the number of repeating children in the group. Their incentive to learn probably was not so great as it was during their first year in the first grade. The correlation coefficient between mental age and reading readiness is $.93$. This indicates an extremely close relationship between the two variables.

The correlation coefficient between I.Q. and reading achievement is $.28 \pm .084$. Here again, the size of the r is great enough to cause some doubt as to the degree of confidence which can be placed in this correlation.

Scores from the Harrison-Stroud Reading Readiness Test show a correlation coefficient of $.82 \pm .033$ with reading achievement. This signifies a high relationship between the two variables and agrees with the findings of Grant(11) and Henig(14), both of whom discovered a high degree of relationship between reading readiness as determined by test scores, and reading achievement.

The factors showing positive significance with reading growth, as determined from the test results obtained from this study, are mental age and reading readiness as indicated by reading-readiness test scores.

Analytical Case Studies of Twenty-Two Selected Children Who Were Under Observation

The following pages contain case-study analyses of twenty-two selected children from the total number included in the study. These case studies contain the data obtained from the tests for each child, as well as some subjective data pertaining to the home situation and pre-school experiences, with reference to the degree of readiness shown at school entrance and subsequent growth in the developmental reading program.

P. Z. : Harrison-Stroud Reading Readiness Test---Type IV
(percentile rankings)

Ia: 63rd.	III: 82nd.
Ib: 34th.	IV: 6th.
II: 18th.	V: 56th.

California Test of Mental Maturity

M.A. 6-2	I.Q. 100
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Gates Primary Reading Tests

I. Reading Age, 7-6.3	Reading Grade, 2.23
II. Reading Age, 6-9	Reading Grade, 1.60
III. Reading Age, 7-0	Reading Grade, 1.75

P. Z. : P. Z. was the older of two children. Her parents had both received a high-school education. Her father was a factory worker, her mother a housewife. P. had been exposed to many experiences during her pre-school years. She was able to depend upon herself, and was a perfectionist in her work. She worked slowly at any given task. P. was six years, two months old when she entered first grade. The readiness test results classified her as "Type IV" or as a child who would require an extended program of readiness before beginning initial reading instruction. After approximately six weeks of readiness training, P. showed enough readiness to enable her to successfully enter the initial stage of reading instruction. After beginning reading instruction, she progressed steadily, and at the end of the term had successfully completed the prescribed first-grade reading program.

J. B.: Harrison-Stroud Reading Readiness Test--Type III
(percentile rankings)

Ia: 87th.	III: 82nd.
Ib: 34th.	IV: 50th.
II: 57th.	V: 82nd.

California Test of Mental Maturity

M.A. 7-0	I.Q. 115
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Gates Primary Reading Tests

I. Reading Age, 7-8	Reading Grade, 2.40
II. Reading Age, 7-6	Reading Grade, 2.20
III. Reading Age, 7-2	Reading Grade, 1.90

J. B. was the older of two children. His parents had both completed a high-school education. His father was a factory laborer, his mother, a housewife. J. was a mature youngster; he had been exposed to many experiences during his pre-school life. J. was six years, one month old when he entered the first grade. The scores he obtained on the readiness test, placed him in the group which was classified as "Type III", or those children who could receive reading instruction along with training in those readiness skills in which they were weak. After approximately six weeks of readiness training, J. was able to begin reading instruction. At the end of the year, he had successfully completed the first-grade reading program.

J. : Harrison-Stroud Reading Readiness Test Type IV
(percentile rankings)

Ia:	41st	III:	19th
Ib:	1st	IV:	27th
II:	10th	V:	82nd

California Test of Mental Maturity
MA 7-1 IQ 100

Gates Primary Reading Test				
I	Reading Age 6-6	Reading Grade	1.30	
II	Reading Age 6-6.5	Reading Grade	1.35	
III	Reading Age 6-7	Reading Grade	1.40	

J. was the fifth child in a family of six children. Neither of his parents had completed high school, both having completed school through the 10th grade. His father was a truck driver, his mother, a housewife. J. had experienced conflicting disciplinary measures in the home, until he was confused about what he should do. Each of J's older brothers and sisters had been successful in school, and he was often taunted because of his lack of success. J. was seven years, one month old when he entered first grade for the second time. The readiness test classified him as "Type IV," which indicated that he probably should receive extended readiness training. J. had a severe speech defect, which did not respond to speech correction. He received readiness instruction throughout the first semester, and at the end of the term he was reading successfully at the primer level.

L. O. : Harrison-Stroud Reading Readiness Test Type II
 (percentile rankings)
 Ia: 67th III: 93rd
 Ib: 55th IV: 95th
 II: 85th V: 25th

California Test of Mental Maturity
MA 7-3 IQ 108

Gates Primary Reading Test				
I	Reading Age	7-6	Reading Grade	2.20
II	Reading Age	7-5.5	Reading Grade	2.15
III	Reading Age	7-2	Reading Grade	1.90

L. was the older of two children. His father and mother had both completed one year of college training. His father was an attendant at the V. A. Hospital, his mother, a housewife.

L. was an extremely mature child. He had a great deal of self sufficiency. L. was a large child and was awkward in his physical movements. L. was six years, nine months old when he entered first grade. The classification given him by the readiness test was "Type II", or a child who could receive immediate reading instruction combined with training in the readiness skills in which weakness was apparent. L. received readiness training for approximately six weeks. He progressed steadily in the reading program and at the end of the term was successfully reading many books on the first reader level.

N. : Harrison-Stroud Reading Readiness Test Type V
(percentile rankings)

Ia:	14th	III:	10th
Ib:	2nd	IV:	31st
II:	57th	V:	38th

California Test of Mental Maturity
MA 7-2 IQ 101

Gates Primary Reading Test

I	Reading Age 6-8.5	Reading Grade	1.55
II	Reading Age 7-1	Reading Grade	1.80
III	Reading Age 7-0	Reading Grade	1.15

N. was the second of three children. She had one brother, age 8 years, and one sister, age one year. Both of N's parents had completed high school. Her father was a construction worker, her mother, a housewife. During the previous year, the family had moved three times, which necessitated N's transferring to three different schools. She was a sensitive child and did not readily adjust to new situations. N. was seven years, one month old when she entered first grade for the second time. From scores obtained on the readiness test, she received the classification "Type V," which indicated that she probably should receive a full year of readiness instruction. N. had weak eye muscles, and although she wore correction lenses, she had difficulty with visual discrimination. During the second semester, N. showed sufficient readiness to begin reading instruction. Her progress was steady, and at the end of the term she was reading successfully at the primer level.

Ia: 87th III: 82nd
Ib: 20th IV: 76th
II: 57th V: 3rd

California Test of Mental Maturity
MA 6-5 IQ 92

Gates Primary Reading Test

I	Reading Age 7-4	Reading Grade	2.00
II	Reading Age 7-7	Reading Grade	2.30
III	Reading Age 7-1.5	Reading Grade	1.85

V. was the oldest of three children. His parents had both completed school through the eighth grade. His father was a factory laborer, his mother, a housewife. V's mother was too busy with the younger children to have much time for him. Any failure V. experienced created in him an intense feeling of insecurity. He tried very hard to always succeed in his work. He worked slowly in order that he might be correct. V. was six years, eleven months old when he entered first grade for the second time. The readiness test gave him the classification of "Type III," which indicated that he could receive reading instruction combined with training in the readiness skills in which he was weak. V. was able to begin reading instruction after approximately eight weeks of readiness training. He progressed steadily, and at the end of the term was reading successfully at the first-reader level.

D1 : Harrison-Stroud Teading Readiness Test Type IV
(percentile rankings)

Ia: 87th III: 10th
Ib: 34th IV: 38th
II: 33rd V: 56th

California Test of Mental Maturity
MA 6-1 IQ 97

Gates Primary Reading Test

I	Reading Age 6-11	Reading Grade	1.70
II	Reading Age 6-11	Reading Grade	1.70
III	Reading Age 7-2	Reading Grade	1.90

D. was the older of two children. His parents had both attended school through the twelfth grade. His father was a construction worker, his mother, a waitress. D. had always been allowed a great deal of freedom. He had experienced little discipline. D. had difficulty in making the initial adjustment to school and in learning to work and play cooperatively with the other children. His parents were interested in his success at school. D. was six years, three months old when he entered first grade. The classification he received from the readiness test was "Type IV".

D's classification meant that on the basis of the scores he received on the readiness test, he was considered to be a child who would require an extended readiness program before beginning initial reading instruction. D. showed readiness for reading after approximately 12 weeks of readiness training, and after attacking initial reading activities, progressed steadily. At the end of the school term he was reading successfully on the first reader level.

M. C. : Harrison-Stroud Reading Readiness Test Type II
(percentile rankings)

Ia: 87th	III: 53rd
Ib: 84th	IV: 76th
II: 57th	V: 82nd

California Test of Mental Maturity
MA 6-2 IQ 101

Gates Primary Reading Test

I	Reading Age 7-11	Reading Grade	2.55
II	Reading Age 7-7.5	Reading Grade	2.35
III	Reading Age 7-3	Reading Grade	1.93

M. C. was the younger of two children. Both of his parents had completed a high school education. His father was a factory laborer, his mother a housewife. M. C. had been exposed to many experiences during his pre-school life. He attended kindergarten during the year previous to his entrance in first grade. His parents were interested in his progress at school, but did not emphasize it unduly. M. C. was six years, one month old when he entered school. He was classified as "Type II," which indicated that he was ready to begin reading instruction. After approximately six weeks of readiness training. M. C. was able to attack the initial stage of reading. He was successful in the beginning activity, and showed steady growth throughout the year. At the end of the term M.C. had successfully completed the reading program set up for first grade.

T. : Harrison-Stroud Reading Readiness Test Type III
(percentile rankings)

Ia: 87th	III: 53rd
Ib: 55th	IV: 50th
II: 33rd	V: 56th

California Test of Mental Maturity
MA 7-1 IQ 113

Gates Primary Reading Test

I	Reading Age 7-3	Reading Grade	1.95
II	Reading Age 7-5.5	Reading Grade	2.15
III	Reading Age 7-7	Reading Grade	2.30

T. was the younger of two children. His father and mother had both completed high school. His father was a factory laborer.

T's mother was a housewife. He had been exposed to many experiences during his pre-school years. At home he was allowed freedom, but was subject to discipline as well. He made the initial adjustment to school easily and could work and play cooperatively with the other children. T. was six years, three months old when he entered first grade. He received a classification of "Type III," from the scores obtained on the readiness test. This meant that he could begin initial reading instruction, combined with instruction in those readiness skills in which he was weak. After approximately six weeks of readiness instruction, T. was able to begin initial reading instruction. He progressed steadily, and at the end of the term had successfully completed the prescribed reading program for first grade.

J. L. Harrison-Stroud Reading Readiness Test Type V
(percentile rankings)

Ia:	0	III:	41st
Ib:	0	IV:	1st
II:	10th	V:	12th

California Test of Mental Maturity
MA 4 IQ 65

Gates Primary Reading Test

I	Reading Age 6-5	Reading Grade	1.20
II	Reading Age 6-7.5	Reading Grade	1.45
III	Reading Age 6-7.5	Reading Grade	1.45

J. L. was the second child in a family of five children. His father had completed only the first grade of school, his mother had completed the fourth grade. J. L. was a happy youngster, but had had few experiences, and was not able to understand new concepts. He was six years, four months old when he entered the first grade. He was classified as "Type V," from the results obtained from the readiness test. This indicated that he should receive readiness instruction for the full year. J. L. showed no progress in developing readiness skills, and at the end of the year he was working at an early level of readiness instruction.

M. S.: Harrison-Stroud Reading Readiness Test Type V

Ia:	4th	III:	31st
Ib:	13th	IV:	27th
II:	33rd	V:	1st.

California Test of Mental Maturity
MA 6-8 IQ 106

Gates Primary Reading Test

I	Reading Age 6-5.7	Reading Grade	1.27
II	Reading Age 6-7.5	Reading Grade	1.45
III	Reading Age 6-7.5	Reading Grade	1.45

M. S. was the youngest in a family of three children.

M.S.'s mother and father had been divorced before his birth. His mother had completed school through the twelfth grade. M. had experienced little control during his pre-school years. He was secure in the school situation, but lacked interest in the school activities. M. was six years, three months old when he entered school. The reading readiness test classified M. as "Type V" which meant that he could be expected to remain in the readiness program throughout the year. M.S. received readiness training until March, when he showed enough skill to enable him to attack the reading program. He was successful in his attack, and at the end of the term was reading with success at the pre-primer level.

V. P. : Harrison-Stroud Reading Readiness Test Type IV
(percentile rankings)

Ia: 62nd	III: 82nd
Ib: 55th	IV: 76th
II: 85th	V: 82nd

California Test of Mental Maturity
MA 7-8 IQ 130

Gates Primary Reading Test

I	Reading Age	7-9.5	Reading Grade	2.47
II	Reading Age	7-1	Reading Grade	1.80
III	Reading Age	7-7	Reading Grade	2.30

V. P. was the third child in a family of four children. The other children were girls; he was the only boy. This resulted in his receiving a great deal of attention from the other members of the family. Both of his parents had received a high-school education. His father was a factory worker, his mother, a housewife. V. P. was five years, eleven months old when he entered first grade. The Harrison-Stroud Reading Readiness Test classified him as "Type IV", or as being able to begin reading instruction in a group where he would receive additional training in those readiness skills in which he showed weakness. After approximately six weeks of readiness instruction, V. P. was able to attack the initial stage of reading. His growth was steady, and at the end of the term he had successfully completed the first-grade reading program.

S. K. was the oldest of three children. His father and mother had both received a high school education. His father was a factory worker, his mother a telephone operator. S. K. had been hospitalized for two years of his pre-school life. He had developed a large degree of insecurity as a result. S. K. was six years, four months old when he entered school. He was classified as "Type III," from the results of the readiness test which indicated that he could be placed in a reading group in which he would receive additional instruction in those readiness skills in which he was weak.

S. K.'s progress was irregular and he received readiness training throughout the first semester before he showed sufficient skill to insure a successful experience in the reading program. At the end of the term S. K. was reading with success at the primer level. The test scores S. K. received are as follows:

S. K. : Harrison-Stroud Reading Readiness Test Type III
(percentile rankings)

Ia: 87th	III: 63rd
Ib: 20th	IV: 12th
II: 57th	V: 38th

California Test of Mental Maturity
MA 6-8 IQ 104

Gates Primary Reading Test

I	Reading Age 6-8	Reading Grade	1.50
II	Reading Age 6-9	Reading Grade	1.60
III	Reading Age 6-10	Reading Grade	1.65

L. B. : Harrison-Stroud Reading Readiness Test Type III
(percentile rankings)

Ia: 62nd	III: 93rd
Ib: 20th	IV: 86th
II: 18th	V: 82nd

California Test of Mental Maturity
MA 7-4 IQ 105

Gates Primary Reading Test

I	Reading Age 7-1.5	Reading Grade	1.85
II	Reading Age 7-3	Reading Grade	1.95
III	Reading Age 7-1	Reading Grade	1.80

L. was the oldest of four children. His father was a factory laborer. He had completed school through one semester of college. His mother, a housewife, had completed high school. L.'s mother was too busy with the younger children to have much time for him. L. was a happy-go-lucky child, who was not particularly interested in success or failure at school. He was six years, ten months old when he entered first grade for the second time. The Harrison-Stroud Reading Readiness Test classified him as "Type III," or as a child who could enter reading instruction, combined with training in the readiness skills in which he was weak. After approximately eight weeks of readiness training L. was able to begin initial reading activities. He grew steadily and at the end of the term was reading successfully on the first-reader level.

Harrison Stroud Reading Readiness Test
(percentile rankings)

Type IV

Ia: 62nd III: 74th
Ib: 55th IV: 19th
II: 0 V: 1st

California Test of Mental Maturity
MA 5-9 IQ 83

Gates Primary Reading Test

I	Reading Age	6-10	Reading Grade	1.65
II	Reading Age	7-2	Reading Grade	1.90
III	Reading Age	6-9	Reading Grade	1.60

J. was the youngest of six children, five of whom were being cared for in the Children's Home. J. lived with an elderly aunt and uncle. Her parents had abandoned the family when she was an infant. J. was emotionally immature; she resorted to tears on the slightest provocation, and made no attempt to solve her own problems. She could not successfully adjust to new situations within a short period of time. J. was six years, ten months old when she entered first grade for the second time. She was classified as "Type IV," from the results obtained from the Harrison-Stroud Reading Readiness Test, which indicated that she should receive an extended program of reading. J. was kept in readiness training for the first semester. After attacking the initial reading activities, she progressed slowly, but steadily. At the end of the school term, J. was reading successfully on the primer level.

M. S. : Harrison-Stroud Reading Readiness Test

Type V

Ia: 4th III: 31st
Ib: 13th IV: 27th
II: 33rd V: 1st

California Test of Mental Maturity
MA 6-8 IQ 106

Gates Primary Reading Test

I	Reading Age	6-5.7	Reading Grade	1.27
II	Reading Age	6-7.5	Reading Grade	1.45
III	Reading Age	6-7.5	Reading Grade	1.45

M. S. was the youngest in a family of three children. His father and mother had been divorced before his birth. His mother had completed school through the twelfth grade. M. had experienced little control during his pre-school years. He was secure in the school situation, but lacked interest in the school activities. M. was six years, three months old when he entered school. The Reading Readiness Test results classified him as "Type V", which meant that he could be expected to remain in the readiness program throughout the year. M. S. received readiness training until March, when he showed enough skill to enable him to attack the reading program. He was successful in his attack and at the end of the term was reading with success at the pre-primer level.

H. P.: Harrison-Stroud Reading Readiness Test
(percentile rankings)

Type V

Ia:	2nd	III:	19th
Ib:	1st	IV:	27th
II:	5th	V:	2nd

California Test of Mental Maturity
MA 5-3 IQ 89

Gates Primary Reading Test

I Reading Age	6-5	Reading Grade	1.20
II Reading Age	6-7.2	Reading Grade	1.42
III Reading Age	6-10	Reading Grade	1.65

H. was the younger of two children. He had one sister, age 14. His father and mother had both attended school through the twelfth grade. His father was a factory laborer, his mother, a housewife. He had never been allowed to think for himself before the time of his school entrance. This over-protective attitude on the part of his parents and his sisters, seriously handicapped him in his development of the readiness skills. H. was interested in school, and in the work, but was too dependent upon the teacher for help. He was incapable of thinking of the next step to be taken. At the end of the school term, he was still unable to find the way home from school by himself. H. was five years, eleven months old when he entered school. The readiness test classified him as "Type V," which indicated that he probably would require a full year of readiness instruction. In March H. was able to begin reading instruction, and at the end of the year was reading successfully on the pre-primer level.

C2: Harrison-Stroud Reading Readiness Test
(percentile rankings)

Type V

Ia:	26th	III:	5th
Ib:	0	IV:	3rd
II:	0	V:	3rd

California Test of Mental Maturity
MA 4-6 IQ 75

Gates Primary Reading Test

I Reading Age	6-6	Reading Grade	1.30
II Reading Age	6-8.2	Reading Grade	1.52
III Reading Age	6-8.5	Reading Grade	1.55

C. was an only child. She lived with her mother and step-father. Her step-father was a coal miner, her mother a housewife. The mother was subject to epileptic spells, and C. had often found her unconscious. C. had developed a large degree of withdrawal from reality. She was apparently unaware of activities being carried on about her. She sat quietly and would very seldom talk.

C. did not attempt to associate with the other children on the playground until the end of the school year. C. was six years old when she entered the first grade. On the basis of the scores she received on the readiness test, she was classified as "Type V," which indicated that she would probably require a full year of readiness instruction. C. was kept in readiness activities during the major portion of the year. She entered initial reading activities in March, and was reading successfully on the pre-primer level at the end of the year. By the time the year was over C. apparently was feeling a degree of security in the school situation.

J². Harrison-Stroud Reading Readiness Test
(percentile rankings)

Ia:	0	III:	19th
Ib:	20th	IV:	27th
II:	57th	V:	3rd

California Test of Mental Maturity

MA	67	IQ	84
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Gates Primary Reading Test

I	Reading Age 6-5	Reading Grade	1.20
II	Reading Age 6-7.5	Reading Grade	1.45
III	Reading Age 6-8	Reading Grade	1.50

J. was the sixth child in a family of eight children. His father and mother had attended school through the eighth grade. His father was a coal miner, his mother a housewife. The parents were too busy to take much active interest in J's problems. The older brothers and sisters had developed an over-protective attitude toward the younger children in the family. J. was extremely shy. He lacked many of the readiness skills, and as a result of his inability to depend upon himself, was unable to easily grasp the concepts which were introduced at school. J. was classified as "Type V," as a result of the scores obtained on the reading readiness test, this meant that he probably would require a full year of readiness training. J. was six years, eight months old when he entered first grade. He required an extensive readiness program, but at the end of the school term he was reading with success at the pre-primer level.

C. was the younger of two children. Her parents had both completed school through the twelfth grade. Her father was a factory worker, her mother a housewife. C. had a history of chronic illness, and at her school entrance was lacking in emotional stability, as a result of the overprotection she received at home. Her brother had been very successful in learning at school. C.s parents were interested in her progress at school, but did not pressure her at home. C. was six years, seven months old when she entered school. She was successful in her early school experiences and began to grow in emotional stability.

C. was classified as "Type IV," according to The Harrison-Stroud Reading Readiness Test. This meant that she could be placed in a reading group with additional training in those readiness skills in which she showed a weakness. C. was able to begin reading instruction after approximately eight weeks of readiness training. She progressed steadily in the reading program, and at the end of the school term, had successfully completed the prescribed reading program for the first grade. The test scores C. received are as follows:

C. : Harrison-Stroud Reading Readiness Test Type IV
(percentile rankings)

Ia:	87th	III:	74th
Ib:	85th	IV:	86th
II:	85th	V:	38th

California Test of Mental Maturity
MA 7-8 IQ 115

Gates Primary Reading Test

I	Reading Age 7-3	Reading Grade	1.95
II	Reading Age 7-0	Reading Grade	1.75
III	Reading Age 7-2	Reading Grade	1.90

S.: Harrison-Stroud Reading Readiness Test Type III
(percentile rankings)

Ia:	62nd	III:	82nd
Ib:	84th	IV:	68th
II:	18th	V:	16th

California Test of Mental Maturity
MA 80 IQ 102

Gates Primary Reading Test

I	Reading Age 7-6	Reading Grade	2.20
II	Reading Age 6-11	Reading Grade	1.70
III	Reading Age 7-0	Reading Grade	1.75

S. was the only child in his family. His father and mother had both completed high school. His father was a policeman, his mother, a housewife. S. had been exposed to many experiences previous to his school entry. He had been allowed much freedom at home, but showed insecurity as a result of having lived with his grandparents. He had received orders from so many people, that he was confused as to whom he should listen. S. was six years, six months old when he entered school. He received the classification of "Type III," from the results of the reading readiness test. This indicated that he should be placed in a reading group in which he could receive additional training in the reading skills in which he was weak.

S. was given approximately six weeks of readiness instruction and then was ready to begin the initial stage of reading. He showed steady growth in the reading program, and at the end of the term had successfully completed the first grade reading program.

J. T.: Harrison-Stroud Reading Readiness Test Type V
(percentile rankings)

Ia:	1st	III:	5th
Ib:	0	IV:	38th
II:	2nd	V:	5th

California Test of Mental Maturity
MA 5-8 IQ 88

Gates Primary Reading Test

I	Reading Age 6-5	Reading Grade	1.20
II	Reading Age 6-7.5	Reading Grade	1.45
III	Reading Age 6-10	Reading Grade	1.65

J. T. was the youngest in a family of five. His parents had not completed eight years of school. His father was a coal miner, his mother, a housewife. Older children in the family had developed an over-protective attitude toward J. which resulted in a complete dependence on others on J's part. J. was six years, five months old when he entered the first grade. The readiness test classified J. T. as "Type V," which indicated that he would require a full year of readiness instruction. J. T. did not progress far in developing readiness skills. He could not grasp new concepts readily, and received readiness instruction throughout the year. At the end of the school term J. T. had not shown sufficient readiness to enable him to begin reading instruction.

W. H. : Harrison-Stroud Reading Readiness Test Type III
(percentile rankings)

Ia:	62nd	III:	82nd
Ib:	20th	IV:	12th
II:	57th	V:	38th

California Test of Mental Maturity
MA 7 IQ 119

Gates Primary Reading Test

I	Reading Age 7-3	Reading Grade	1.95
II	Reading Age 6-8.8	Reading Grade	1.58
III	Reading Age 6-10	Reading Grade	1.65

W. was the only child in his family. His father and mother had both completed high school. His father was a factory worker, his mother, a housewife. W. was an independent child. He knew about many things. He was five years, ten months old when he entered the first grade.

W. received the classification of "Type III," according to the Harrison Stroud Reading Test. W. could begin reading instruction combined with training in the readiness skills in which he was weak. However, W's progress was irregular, and he required readiness training throughout the first semester. When he entered the reading program, he progressed slowly, but steadily. At the end of the school term he was reading successfully on the primer level.

Summary of Data Collected for Twenty-Two Selected
Children Who Were Under Observation

A survey of the anecdotal data collected for the twenty-two children under case study reveals significant information about the relative importance of certain individual factors, as these affect readiness for reading. The evidence is clear that the home had a decided effect, either positive or negative in influence, upon reading readiness. Children who came from broken homes and showed emotional patterns of unrest and instability, tended to lag behind in readiness for reading, and subsequently, in reading achievement during the first year of reading instruction.

There seems to be considerable relation between the schooling parents have received and the readiness of their offspring. Children whose parents had received extremely limited schooling were handicapped in the development of readiness for reading, either as a result of lack of interest on the part of the parents, or as a result of the parents' lack of knowledge in recognizing those activities and experiences which lend to reading readiness. These children presented a readiness problem, in that they required an intensive readiness program which extended in scope from those activities which would enable them to develop the earliest readiness concepts.

The degree to which parents are interested in the activities and development of their children has a decided influence upon the growth of children in the developmental reading program. Those children who came from homes in which both parents were employed, or where, because of the number of young children in the family, the parents did not have sufficient time to be with the child, were characterized by a lack of experiences, and, on the part of the child, a lack of motivation to succeed in the reading program. Those children who had actively participated, cooperatively with their parents, in family life and activities, showed a high degree of readiness for reading, and were successful in attacking the program of reading instruction during the first year of school.

Children who have experienced a severe illness while very young, as well as those children who have a history of chronic illnesses, tend to be retarded in readiness for reading, particularly with respect to work habits and independence, resulting from the over-protective attitude developed by the parents.

Children who have older brothers and sisters, by several years, show a degree of retardation in the attitudes and abilities necessary to successful school experiences. The number of cases supporting this observation was too small to fortify a sweeping generalization, but the indications are that the protective attitude of the older children toward the younger develop habits of dependence in the younger child. These habits handicap the child in developing his abilities as an individual.

The economic status of the family has little effect upon reading growth, except in cases where extreme poverty was present. The underlying cause of this condition was the lack of mental ability on the part of the parents.

This study indicates that a very fruitful outlet for adult education would be in the study of the processes involved in the development of pre-school children. Parents, and consequently their children, would profit greatly from discussion seminars with first-grade teachers, in which parents could be shown the importance of pre-school experiences in attacking the problem of formal schooling.

CHAPTER V

SUMMARY AND CONCLUSIONS

Summary

The purpose of this paper has been to survey the factors related to success in beginning reading and to discover the influence of various factors in predicting future success or failure in reading in the primary grades. The factors basic to reading readiness have been identified and enumerated (Chapter I), and the influence of these factors upon growth have been considered from two approaches. In the first place the approach has been an objective one, through the study of certain test data obtained from the administration of mental tests, reading readiness tests, and reading achievement tests during the first year of school. Secondly, the approach has been subjective, through an analytical interpretation of information revealed in the study of data secured from observation of a small portion of the total population of children included in the group under study.

This study is an outgrowth of the interest which this investigator has in the study of reading readiness, and in particular, an evaluation of the relative importance of the several indices of successful beginning reading experiences; also, the discovering, by inference, of the relative worth of teaching procedures which make the greatest contribution to successful initial reading experiences.

The study was conducted using a sample of first-grade children in the Danville Public Schools, during the school term 1954-55. One hundred children were included in the sample group. The learning histories of twenty-two of these children were studied intensively through the case study approach. Three test batteries were administered to the group: (1) The Harrison-Stroud Reading Readiness Test, (2) The California Test of Mental Maturity, and (3) The Gates Primary Reading Test. The data collected from these objective sources were tabulated and analyzed.

Conclusions

A study of the complete data seems to warrant the following conclusions:

1. Chronological age has extremely limited significance in predicting reading readiness or reading achievement. (See pp. 28-29.)
2. Mental age is highly indicative of probable reading readiness, and also shows significance with relation to indicating probable reading growth. (See p. 29.)
3. The Intelligence Quotient has limited significance when used to predict the reading achievement of pupils in grade one. (See p. 30)
4. The Harrison-Stroud Reading Readiness Tests can be used with considerable confidence to guide the teacher in making judgments of probable success in learning to read in grade one. (See p. 30.)
5. Many intagible factors, working systematically from within and from outside the individual, exert influence upon the development of reading readiness and the growth in the reading program.

Limitations of the Study

1. There has been no attempt to make instruction uniform, or to control the influence of the factor of teacher personality.

2. The sample is too limited in size to justify broad generalizations. Neither can the sample be considered a sample of typical first-grade pupils.

Implications and Recommendations

This study makes evident the existence of a real need to adopt measures which will increase the relative number of beginning first-grade pupils who have success in the developmental reading program instead of the frustration which attends failure. Mental tests and readiness tests are valid measures for predicting the success a child will have in learning to read. Within limits they are accurate enough to a prediction of probable success, of much greater accuracy than by pure chance or guess.

The increasing size of classes resulting from a scarcity of teachers together with the climbing birth-rate, has made it necessary for us to search for ways and means whereby reading instruction in groups may become more effective. We must seek diligently for ways and means whereby teacher time and effort may be spent for the greatest good.

This study reveals the difference between individuals in native ability, and mental aptitudes in particular. It implies that the learning process of children is always the result of the combined influence of heredity and environment. Subsequently, serious doubt arises about the saneness which dictates the common practice of basing entrance to school upon chronological age. By state law, any child who reaches the sixth birthday before December 1st following the beginning of the school term in September is eligible to start to school. This study reveals that all children

of this age are not ready to participate in the learning activities which they are required to have when they enroll in the typical first grade of an elementary school in Illinois, nor are they capable of progressing to an acceptable level of achievement in the first grade reading program. When a child with low readiness is forced to enter those activities beyond his developmental level, failure and frustration follow. The facts are clear, either the immature child fails, or the instructional tasks for this learner must be graded for the immature child. This means that standards of achievement must be adjusted downward. Herein one finds another instance wherein professional judgment operates at cross purposes with the wishes of lay people, parents or legislators, as to a decision about when the child should enter school.

If each child is to receive a needed share of instructional time it is necessary that measures be taken to decrease the size of classes. Each child must receive some individual attention if he is to reach maximum growth in learning. As classroom enrollment grows, the time the teacher has for individual instruction lessens. The need for more teachers and more classrooms means an increase in school budgets. Each time a child is retained, the expense in educating this child is duplicated; each time a child is retained it increases the load of the first-grade teacher. If provision could be made so that each school system is permitted to decide when the child should enter school, according to the degree of readiness for school which he shows, it is possible that school funds could be spent more wisely. If children had developed sufficient growth in the readiness skills before their school entrance

the number of failures would decline. The needless expenditure of school funds from this practice would be avoided.

Children who fail as a result of lack of readiness development have been robbed of their initial enthusiasm and initiative to learn. Forcing the child to read when he has not developed sufficient readiness often creates in him an intense dislike for the reading process as well as an attitude of defeat. Perhaps by insuring sufficient readiness development before school entrance, we would have fewer children frustrated in the reading program.

The importance of reading readiness has been recognized by school workers. Research has shown that those children who are seriously handicapped in readiness abilities, comprise the majority of school failures. That the development of sufficient readiness before school entrance is a major factor in preventing failure at school, is to be recognized. The information we have concerning growth in the developmental reading program indicates that measures taken to decrease school failures, might not only be the answer to problems of overcrowding, but also be one means of economical expenditure of school funds.

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APPENDIX

THE *Harrison-Stroud* Reading Readiness Tests



By M. Lucile Harrison

ASSOCIATE PROFESSOR OF ELEMENTARY
EDUCATION, STATE COLLEGE OF EDUCATION, GREELEY, COLORADO

AND James B. Stroud PROFESSOR OF EDUCATION
AND PSYCHOLOGY, STATE UNIVERSITY OF IOWA, IOWA CITY, IOWA

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The Harrison-Stroud Reading Readiness Tests are group tests of specific abilities and skills that children use in beginning to learn to read. The tests are published in three separate booklets which are banded together in sets of 25 and packaged in one envelope along with the Teacher's Manual and the Class Record Sheet.

Twenty-five copies of Test Booklet No. 1 are banded with a red paper strip to make them easily identifiable. Booklet No. 1, consisting of Test I, Parts a and b, and Test II, should be given at the first testing period. The band for Test Booklet No. 2 is yellow. This booklet contains Tests III and IV, which should be given during the second testing period. Test Booklet No. 3, banded in blue, contains Test V, which should be given at the final testing period.

To indicate answers on the various parts of the tests, the children are required to do only two things: (1) to draw a line under a word or picture or (2) to draw a line from one word or picture to another. The Specific Directions for Administering and Scoring (Part 11) begin on page 9 of this Manual.

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R 5.1

A child is ready to learn to read when he has acquired the understandings, skills, and attitudes which the initial reading program demands of him. Studies of the nature of beginning reading matter and of the reading process itself indicate the importance of an instructional program which provides training in: (1) Using Pictures, (2) Using Listening Skills — recognizing the central idea, noting details, and drawing simple conclusions from listening to oral context, (3) Using the Context, (4) Making Auditory Discriminations, (5) Using Context and Auditory Clues, (6) Making Visual Discriminations, and (7) Using Left to Right Sequence.¹ In addition, the teacher should create in the child a desire to learn to read. A modern reading readiness program, therefore, should consist of instructional activities which will help children to acquire these understandings, skills, and attitudes before actual reading begins.

2. A Modern Reading Readiness Test

The Harrison-Stroud Reading Readiness Tests are designed to measure specific readiness skills that are required in the initial reading period. There are five group tests in all, which are identified as follows:

- I. Making Visual Discriminations
 - a. Attention Span Controlled
 - b. Attention Span Uncontrolled
- II. Using the Context
- III. Making Auditory Discriminations
- IV. Using Context and Auditory Clues
- V. Using Symbols

Skill in using pictures is required of the pupils in Tests II, III, IV, and V. Proper use of listening skills is a requisite in following the directions for all the tests. The examination of detailed pictures and word forms in all the tests always proceeds from left to right. Thus, three of the specific skills are factors in tests which measure other skills directly. Tests which provide measures of all the specific skills directly would require lengthy individual tests in addition to the five basic group tests.

Test V measures the pupil's skill in making the associations necessary to relate a symbol to the idea or things for which it stands. Instruction designed to develop this skill cannot be given in the readiness program because a symbol cannot be used to stand for an idea until actual development of a sight vocabulary has begun. A test of this skill was added to the others because it would give information of value in determining the readiness of a child to use effectively a sight vocabulary in meaningful reading.

¹ A program of reading readiness instruction, with a brief description and discussion of the understandings and skills that can be taught prior to the initial reading period, is given in the Teacher's Edition of GETTING READY, A Reading Readiness Workbook, *Reading for Meaning Series*, Paul McKee and M. Lucile Harrison, Boston, Houghton Mifflin Company, 1949.

using any modern reading series, (2) to determine in what group in the first grade the pupil should be placed for instruction, and (3) to find in which of the skills he must have further training before or during the initial reading period.

3. Descriptions of the Tests

I. Making Visual Discriminations.

The ability to make accurate visual discriminations with words is basic to all reading. It is essential in the building up of a sight vocabulary, and equally essential if quick recognition of known words is to be carried out in later, more rapid reading. As the number of words in the sight vocabulary increases, more detailed discriminations must be made very rapidly and accurately. The test of the ability to make visual discriminations has in it words common to early reading vocabularies, words embodying common visual discrimination difficulties, and words frequently reversed, such as *on* and *no*, *was* and *saw*, and *stop* and *pots*. There are thirty-two items, which are divided equally between *Parts a* and *b*. Since there are three practice exercises in the two parts, scores are derived from 29 items.

Because *Parts a* and *b* of *Test I* are comparable forms of the same test, an examination of the pupil's scores on the two parts will reveal his ability to work independently. *Part a* is administered in such a manner that the attention span of the pupils is controlled in each item of the test. Conversely, *Part b* is administered in such a way that attention span is uncontrolled by the examiner and is allowed to affect the test results as it will affect learning to read. *Part b* will locate those pupils who have good visual discrimination powers but who are unable to hold in mind directions for an exercise and to keep at work without the constant supervision of the teacher. *Part a* requires approximately 14 minutes, and *Part b* approximately 8 minutes, for testing.

A special feature of this and all other tests in the *Harrison-Stroud Reading Readiness Tests* is the use of colored boxes as a place-keeping device. Note the functional use of color in the directions for giving each of the items of the tests. Since only primary colors are used, most five- and six-year-old children will be able to recognize them instantly. The red, yellow, and blue wrappers banding the Test Booklets may be used to teach color identification to any children who do not already know these colors.

II. Using the Context.

In the initial reading period the pupil can determine the identity of a strange word through the use of the context, before he can identify it by any other means. In later reading periods, he will continue to use the context to identify strange word forms. The ability to use context before actual reading begins is measured through the pupil's use of context given orally

language familiar to five- and six-year-old children is used in each item of the test. There are twenty items, three of which are practice exercises. Scores are derived from 17 items. The test requires approximately 12 minutes.

III. Making Auditory Discriminations.

The ability to make auditory discriminations is basic to the work in word analysis which the pupil must be taught to do, beginning at the first grade level and continuing throughout the elementary school. If a pupil cannot hear that two words given orally begin with the same sound, he will be handicapped in learning the phonetic skills which help him to determine independently the pronunciation of strange words. This test measures ability to discriminate between spoken words which do or do not begin with identical initial consonant sounds. Only the commonest initial consonant sounds appear among the items. There are 18 items in the test, three of which are practice exercises. Scores are derived from 15 items. The time required for testing is approximately 14 minutes.

IV. Using Context and Auditory Clues.

The ability to use auditory clues with context clues in the identification of strange words is also of great importance in the development of independence in reading. Auditory discrimination acts as a check upon the correctness of guesses from context and aids the pupil in determining which of two or more possible choices of words is the correct one. In this test the pupil listens to oral context which suggests two possible responses illustrated in a group of three pictures. From an auditory clue supplied, he finally selects the one picture representing the only choice which is right for both context and auditory clues. Context which contains ideas and language familiar to five- and six-year-olds has been used and only the commonest of the initial consonant sounds. There are 20 items in the test, three of which are practice exercises. Scores are derived from 17 items. The testing time required is approximately 13 minutes.

V. Using Symbols.

The understanding that abstract symbols, such as printed words, stand for ideas is basic to all reading. Unless the pupil has acquired this understanding and the ability to use it, he can do no more than to "call" words which he has learned as isolated vocal sounds. This test measures the pupil's ability to understand the meaningful use of symbols to represent familiar ideas indicated by pictures. There are 24 items in the test, six of which are practice exercises. Scores are derived from 18 items. The testing time required is approximately 15 minutes.

If the reading readiness program is carried out in the latter part of the kindergarten year, the readiness tests may be given at the close of that instructional program to determine which pupils shall enter the reading program at the beginning of first grade. If the reading readiness program is given at the beginning of the first grade, the tests should be administered at the close of the readiness program. Those pupils who make adequate scores on the tests should go into the reading program as soon as possible. The percentile rank scores for those pupils will be of help to the teacher of reading in grouping the pupils for instruction. Those who have inadequate scores for beginning to read should be given an extended program in reading readiness in the kindergarten, a transition grade, a pre-first grade, or in a non-reading group in the first grade. (See Part 7, *Interpreting the Results of the Tests*, on page 5.)

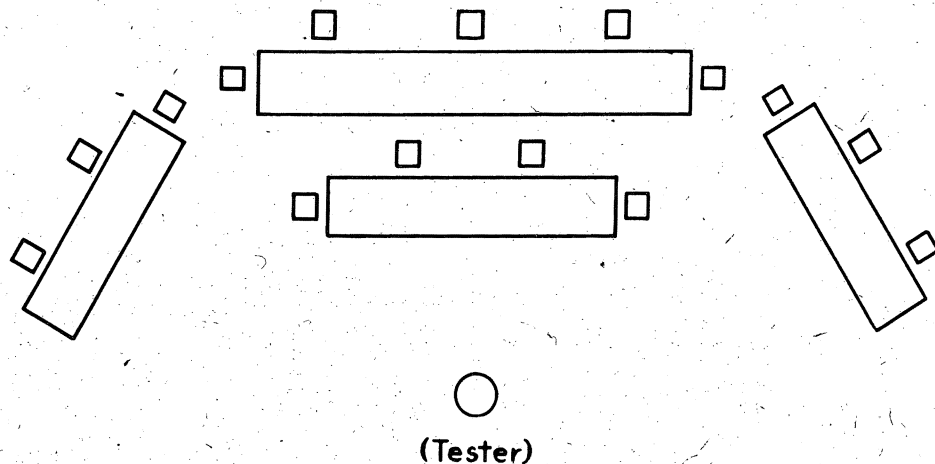
5. General Directions

A. Number of Pupils to be Tested at One Time.

It is recommended that no more than fifteen pupils be tested at one time by one tester. More than that number in the group will tend to lengthen the time required to give the tests.

B. Physical Environment for the Testing.

The pupils should be seated at individual desks or tables, or along one side of long tables facing the tester. If the pupils are seated at long tables, such an arrangement of tables and chairs as illustrated below is very practical. Pupils should be placed far enough apart to avoid copying.



should be in the same room. It is also advisable to place signs on the outside of all entrances to the room stating that testing is in progress and that there should be no disturbances and no visitors.

The lighting should be carefully checked for all pupils. Adequate ventilation and proper temperature should be maintained.

The pupils should use large kindergarten pencils for marking the tests unless they are new implements with which they are unfamiliar. In that case crayons should be used.

C. The Teacher as the Tester.

It is recommended that the teacher test her own pupils since (1) her voice is familiar to the pupils; (2) she will know how to cope with individual pupils' problems; and (3) she will have had a chance to note the behavior, attitudes, and methods of work of the pupils. If the teacher cannot give the tests, the test specialist, the supervisor, or the principal may do so. In such cases, the pupils should have had several opportunities to become acquainted with the tester, his voice, and his manner of speaking.

D. The Establishment of Good Rapport.

The tester should be sure that the test is approached in the spirit of a game on the part of the pupils. No remarks should in any way cause the pupils to fear the testing situation. During the testing (except in *Test I, Part b*) occasional bits of praise should be made to keep the pupils interested and willing to work at the task with the attitude that they wish to do as well as possible. Five- and six-year-olds like to be told that they are "fine workers" and that they are doing "a very grown-up thing." Such remarks usually make them willing to stay with a job until it is finished.

If any pupil seems to be so timid about the testing situation that you think his scores might not be valid or that the rest of the group might be affected by his attitude, he should be tested individually when he has developed a feeling of confidence.

E. Scoring the Tests.

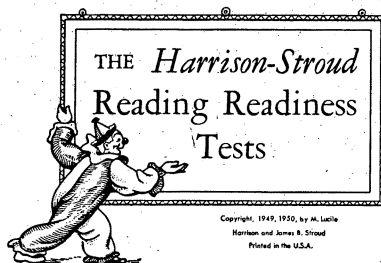
It is well to score each set of test booklets as soon as they have been administered to the pupils. By so doing, extremely faulty markings by pupils, or lack of understanding, can be detected before another part of the test is administered. Those pupils who failed to understand what to do in the first booklet can be watched more closely during the second testing period. Also, significant observations of behavior, attitudes, and work habits can be written into the margins of the tests by the tester or observers before they are forgotten. Observations which will be worth noting are (1) tendencies to copy markings of neighboring pupils, or to work very independently and with a feeling of sureness; (2) ability to make very quick or only very slow

work quietly with a group without distracting others; (5) ability to understand and carry in mind successfully the instructions given during the practice items of the tests; and (6) notes concerning overt reactions to the testing situation.

Place the tests to be scored in a pile with the same page facing up. Count the correct responses for the same page of all the tests in the pile after first referring to the proper page in the Manual for special scoring directions and the scoring key. By scoring the tests this way, the details to be remembered for each part of the test will not be forgotten, and scoring will be uniform for all pupils.

Accept only clearly indicated markings as correct. If a pupil changes his mind after one marking, accept the change if it is clear that an erasure was attempted and that his change of mind was not made after noting another child's mark differing from his own. Accept the final independent choice as the one intended, even though the first was right and the second incorrect.

Using the tables of percentile scores on page 8, determine the correct percentile for each point score on the tests. Plot each percentile on the correct vertical line of the graph on page 12 of Booklet No. 3. Use the percentiles for kindergarten if the tests are given at the end of kindergarten, a transition grade, a pre-first grade, or before entrance to the first grade. Use the percentiles for the first grade if the tests are given after entrance to the first grade. An example of a completed Individual Pupil's Record Sheet (page 12 of Booklet No. 3) is given below.

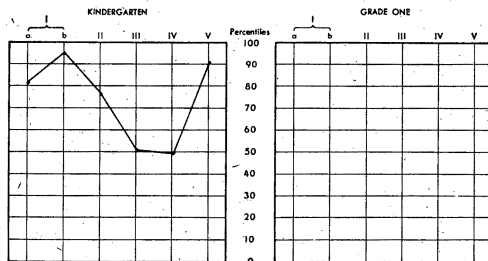


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PUPIL'S NAME Adams, John SEX M
DATE OF BIRTH 7/9/44 DATE OF TEST 5/15/50 AGE 5 YRS. 10 MOS.
TEACHER Margaret Allen EXAMINER Margaret Allen
SCHOOL Laboratory School, C. A. C. C. GRADE Kdg.
INTELLIGENCE TEST Kev. Stanford-Binet DATE GIVEN Oct. 11, 1949
AT DATE OF GIVING INTELLIGENCE TEST: C.A. 5-3 M.A. 6-3 I.Q. 119
AT DATE OF ENTERING GRADE ONE: C.A. 6-2 M.A. 7-4

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PROFILE OF ABILITIES



OTHER RECOMMENDATIONS:

John should be promoted to First grade in the fall. Give special emphasis to his training in initial consonant sounds and in using context and auditory clues. As soon as he achieves success in these two skills, he will probably be able to keep up with a rapidly moving reading group.

TESTS	SCORES
I. Making Visual Discriminations	
a. Attention Span Controlled	<u>13</u>
b. Attention Span Uncontrolled	<u>15</u>
II. Using the Context	<u>16</u>
III. Making Auditory Discriminations	<u>11</u>
IV. Using Context and Auditory Clues	<u>11</u>
V. Using Symbols	<u>18</u>

RECOMMENDATIONS:

Place pupil in Grade One Reading Group which moves
rapidly _____ normally ✓ slowly _____
Retain pupil in Non-reading Group in:
Grade One _____ Kindergarten _____ Transition _____

When all tests are scored and the percentiles plotted on the proper graph on page 12 of Booklet No. 3, the Class Record Sheet should be completely filled out. Names of the pupils in alphabetical order according to surnames should be placed in the first column. The letters F and M may be used in the second column to stand for female and male, respectively. The IQ derived from a reliable test of intelligence should be placed in the third column.

Age data should be computed accurately and recorded for the date of the readiness tests, using the date on which Test Booklet No. 3 was completed, and for the date of entering grade one. Suggestions for accurately determining the age data are given below. (Some of these data are required for individual pupils on page 12 of Booklet No. 3.)

A. Chronological Age.

To find the chronological age at the date of the readiness tests, place the date of completing *Test V* above the birth date of the pupil and subtract the latter from the former. An example follows:

	Year	Month	Day
Date of completing readiness tests	1950	5	19
Date of birth of pupil	1944	2	12
Age at date of readiness tests	6	3	7
Recorded age	6	—	3

The computed age of 6 years and 3 months should be recorded in the fourth column of the Class Record Sheet under years and months. Anything less than 15 days in the computed age may be dropped. Fifteen or more days in the computed age should be added as an extra full month, as in the following computation:

	Year	Month	Day
Date of completing readiness tests	1950	10	9
Date of birth of pupil	1944	11	20
Age at date of readiness tests	5	10	19
Recorded age	5	—	11

To find the chronological ages of the pupils at the date of entrance to grade one, place the date of entrance to grade one above the birth date of each pupil and subtract. Record these ages in the fifth column of the Class Record Sheet.

B. Mental Age.

To determine the mental ages of the pupils at date of entrance to grade one, use the following formula:

$$\frac{C.A. \text{ (Chronological Age)} \times I.Q.}{100} = M.A. \text{ (Mental Age)}$$

Recorded M A: 7 - 4

Mental ages at the date of entrance to grade one should be placed in the sixth column of the Class Record Sheet.¹

C. Other Data.

In columns seven through twelve, place the percentile scores of the readiness tests. In column thirteen, recommendations for placement, grouping, and special instruction should be noted. A sample of a fully filled out Class Record Sheet follows:

[illegible]

¹ All computations described above can be greatly simplified by using the chronological and mental age scales of THE DELP IQ COMPUTER, Boston, Houghton Mifflin Company, 1950.

struction in grade one, (2) in what group to place him for instruction, and (3) in which skills further teaching is necessary before or during the initial period of reading instruction.

Scores on the *Harrison-Stroud Reading Readiness Tests* do not necessarily indicate how well children will read by the end of grade one. There are many uncontrollable factors which affect reading progress (see Section C, page 6) both during and after the acquiring of the specific skills of the readiness program. For example, a child whose mental development is somewhat retarded may have learned many specific readiness skills. The results of his readiness tests will show that he need not be placed with a group that is spending a great deal of time developing these readiness skills. His intelligence test score and the observations of his teacher will indicate whether the reading group that he enters should be a fast, average, or slow moving group. On the other hand, a child who tests poorly on the readiness tests may soon acquire, through proper training, the necessary specific skills, which, if coupled with high intelligence, may make him one of the best readers in the class by the end of the first grade. Therefore, in the detailed suggestions for interpretation of the percentile scores given below, no attempt has been made to classify the pupils as to fast, average, or slow moving groups but only as to the amount of work needed in the readiness skills.

Since the tests indicate just how well equipped each pupil is in the specific skills he needs in beginning to learn to read, the teacher may use the test scores for placing pupils in homogeneous groups for initial reading instruction. For example, if the tests show that a pupil has a high degree of development in all the specific skills tested, he may be placed for initial reading instruction with a group of children who possess a like degree of proficiency in the specific skills. If a pupil's skills are only moderately developed, he may be placed in an initial reading group composed of children all of whom need training in readiness skills. Just how much work in readiness will be needed by this group, when regular reading instruction should be started, and which children may advisedly be transferred to another group within the class will be determined by the progress made by individuals within the group. If the tests show that a pupil's skills are very poorly developed, he should probably be placed initially in a non-reading group in which an extensive readiness program will be carried out, and admitted to a reading group only when he has shown sufficient growth in the specific skills tested.

A. Pupils Tested at the End of the Kindergarten Year (or Transition or Pre-First Grade)

It is important that the teacher examine each set of scores carefully in order to see the significance of individual scores in relation to one another. No provision is made for averaging the various scores received on the tests; to do so would suggest that these skills develop evenly in children. A study of individual test scores will bring out the significance of groupings of scores within critical zones.

the year. He should be placed with the group of pupils who will require no special instruction in any of the specific skills tested other than that which will follow in the regular program of reading instruction.

TYPE II — PERCENTILE RANK OF 50 OR ABOVE IN ALL OF THE TESTS.

The pupil should be promoted to the first grade at the next regular promotion point, and he should be placed in a group where he can receive further training in those skills for which his percentile score is below 75. Examples of such test results and recommendations for teaching follow:

Percentile Scores on Tests						
Names	I		II	III	IV	V
	a	b				
Jim	81	85	77	51	60	76
Sue	65	57	94	74	83	60
Carol	54	57	55	62	68	91
Bill	96	57	77	74	75	76

JIM should be placed in a group where further training will be given in specific skills. Special emphasis should be placed on initial consonant sounds and the use of auditory and context clues in independent identification of strange words. It is quite possible that he may strengthen these skills sufficiently in a short enough time to permit him to move to the Type I group.

SUE should be placed in the same learning group and given special instruction in visual discrimination and the use of symbols to stand for ideas in the word analysis and word learning portions of the program. She should be given regular reading instruction when it is apparent that she has overcome her specific deficiencies.

CAROL should also be placed in the same group, given special training along all lines in which her scores are below the 75th percentile. She should be given regular reading instruction when she has strengthened the skills in which she tested poorly.

BILL shows excellent development in all important skills but has poor habits of attention and lacks ability to retain directions long enough to complete an exercise without errors. He should be placed in the part of the classroom where there are few distractions, and taught to listen carefully to directions and to correct his own careless errors every time he makes them. If his attention span and work habits improve rapidly, it may seem advisable to place him with the Type I reading group.

pupils where he will receive careful training in all skills which lie below the 75th percentile. The difference between Types II and III is in the amount of emphasis to be given those skills which tested below the 50th percentile. If these happen to be visual and auditory skills, the pupil may have to be taught by a modified kinesthetic method in building up a sight vocabulary until his visual and auditory powers have been strengthened.

TYPE IV — PERCENTILE RANK OF 50 OR ABOVE IN ONLY ONE OR TWO OF THE TESTS.

The pupil should probably have an extended readiness program for a portion of the year in a non-reading group within the first grade. After the extended readiness program and apparent growth in all critical areas, he should be retested with the same readiness tests. He should be placed in a regular group for reading instruction after he has shown considerable growth in the critical areas by raising the percentile scores in the tests in which he made low scores in the first testing.

TYPE V — PERCENTILE RANK OF 25 OR BELOW IN THREE OR MORE OF THE TESTS.

The pupil will probably need another whole year of readiness instruction in kindergarten, a transition grade, or pre-first grade. He should not be placed in the first grade until he has achieved a percentile rank of 50 or above in all tests.

B. Pupils Tested at the Close of a Reading Readiness Program Given at the Beginning of the First Grade.

Pupils whose percentile scores are like those described above in Types I, II, and III should be placed in groups where attention can be given to deficiencies that have been exposed by these tests. Pupils whose scores are like those described in Types IV and V should be retained in non-reading groups and given an extended reading readiness program. Only after a retest and very apparent improvement in the critical areas should they be given actual reading instruction. That reading instruction should then be paced to comply with the slow development of the necessary skills. Special kinesthetic methods may have to be employed in the teaching procedures and mastery should be achieved at each step in learning to read.

C. Other Factors which May Affect Reading Progress.

Other factors which are likely to affect reading progress in the initial period of reading instruction are (1) slow mental maturing and mental abnormalities, (2) slow language growth, poor speech habits, or bi-lingualism, (3) slow physical maturing, physical handicaps such as poor hearing and vision, after-effects of illnesses, poor general health, and lack of physical vigor, and (4) inability to adjust to the school situation, behavior difficulties

careful observation on the part of the teacher will enable her to determine if such factors are operating to affect the learning of individual pupils. Some pupils having difficulties listed under (3) and (4) above often compensate for their difficulties and learn to read with no apparent interference from those factors.

Factors listed under (1) and (2) are most likely to affect success in learning to read. In fact, only pupils with a mental age of 6 - 4 to 6 - 6 are likely to be highly successful in learning to read as reading is taught in most first grades throughout the country. If language and speech handicaps are noted, special training in speech and language abilities should be given. Definite improvement should be noted before pupils so handicapped or retarded are given reading instruction in the usual manner.

Pupils who have serious hearing and visual difficulties should be instructed with specialized techniques which take into account such difficulties. Those with serious visual difficulties should be instructed with special sight-saving materials in sight-saving classes. Those with serious hearing difficulties should be instructed in such a manner that other senses are used more than the sense of hearing. If the teacher is not able to provide such specialized training, special agencies should be sought out which can provide the proper type of training.

8. Standardization

A preliminary edition of the *Harrison-Stroud Reading Readiness Tests* consisting of approximately twice the number of items that now appear in the tests was prepared and administered to a sample of 430 first grade children in a middle western city in the early fall of 1949. An item analysis was then undertaken which designated each item for difficulty and also for its ability to discriminate on each of the tests between the upper 27 per cent of scores and the lower 27 per cent of scores. A careful study of each item, together with its difficulty index and its discrimination index, revealed those items which best served the purposes for which the tests were intended. The final selection of items was then made, and one entire sub-test, which did not contribute materially to knowledge of children's readiness for reading, was eliminated. The remaining items were published in final test form and administered to 221 children in the kindergartens of another middle western city in the late spring of 1950.

Tables of percentiles have been prepared on the basis of the experimental tryouts in both kindergartens and first grades. The percentiles have been checked by the test scores of kindergarten and first grade children throughout the country who have been given the regular edition of the tests in the normal course of the instructional program. The inclusion of these test scores with the previously reported experimental scores does not significantly alter the tables of percentiles which are given below in Part 10. These tables are to be

54 per cent of the kindergarten children who took the same test in the standardization program. As soon as the percentiles have been looked up for the point scores on all the tests, they should be entered as dots in the proper places on the profile of abilities on page 12 of Booklet No. 3. When the dots are connected by a single line, a pupil's strengths and weaknesses in readiness skills are graphically illustrated. After this page has been completely filled in by the teacher, it may be torn from the rest of the test and filed as a permanent record for each child.

9. A Statement about Validity

The nature of the *Harrison-Stroud Reading Readiness Tests* is responsible for a unique situation with respect to validity. Since the various tests were chosen to be direct measures of the specific skills that a pupil needs in beginning to learn to read, validity has been built into the tests from the very beginning. For example, since the ability to make auditory discriminations among consonant sounds at the beginnings of words is one of the specific skills used in learning to read, a test which measures this skill directly will have nearly perfect face validity. The same applies to the other tests, which are also direct measures of specific skills.

In making the item analysis of the experimental edition of the tests, it was noticed that most of the items had an exceptionally high discrimination index figure. When the final selection of items was drawn from the total number of items in the experimental edition, the retained items produced an average discrimination index of .53. Test designers consider any item usable which has a discrimination index of .20, or higher. An index of .30 to .40 is regarded as highly satisfactory, and any figure above .50 is considered exceptionally good. Therefore, it can be seen that the items in this test are superior for the identification of the upper and lower 27 per cent of pupils taking the test.

The fact that many children obtain point scores which give them a high percentile rank and that some children make perfect scores should not be a cause of concern for any teacher. The exceptionally high discrimination indexes and face validity of the test items indicate that if a pupil has a certain skill he will be able to do correctly a great many of the items in that particular test. If he does not have that skill, it is likely that the only items that he gets right will be due to chance. Because of the length of the tests, some children who do not have a particular skill at the beginning of a test will show signs of learning it before the test is completed, even though the items become progressively more difficult. Since children who show evidence of this kind of learning during the testing situation will score far below the upper quartile, they will be placed in groups where additional training is provided, thus firmly establishing their newly acquired skills.

Percentiles for Kindergarten Children						
Point Score	I		II	III	IV	V
	a	b				
18						91
17			94		98	76
16			77		91	60
15		95	55	94	83	43
14	96	85	37	84	75	33
13	81	71	27	74	68	28
12	65	57	22	62	60	22
11	54	46	16	51	50	16
10	43	37	11	40	42	11
9	33	29	7	30	33	8
8	25	21	6	21	23	6
7	19	16	5	14	14	5
6	13	12	4	9	9	4
5	8	9	3	6	6	3
4	5	6	2	4	4	2
3	3	3	1	2	3	2
2	2	2	1	1	2	1
1	1	1	0	1	2	0
0	0	0	0	0	1	0

Percentiles for First Grade Children						
Point Score	I		II	III	IV	V
	a	b				
18						82
17			85		95	56
16			57		86 38	
15		84	33	93	76	25
14	87	55	18	82	68	17
13	62	34	10	74	60	12
12	41	20	5	63 50	50	8
11	26	13	2	53	38	6
10	14	7	1	42	27	5
9	8	4	0	31	19	4
8	4	2	0	19	12	3
7	2	2	0	10	6	2
6	1	1	0	5	3	1
5	0	0	0	2	1	1
4	0	0	0	1	0	1
3	0	0	0	0	0	1
2	0	0	0	0	0	1
1	0	0	0	0	0	0
0	0	0	0	0	0	0

Directions for Administering

Wherever three dots(. . .) are given in the directions below, wait for either an oral or a written response from the children before continuing with the directions. The directions in boldface type are instructions to the tester, and are not to be read to the children. The directions to the children should be spoken exactly as they are given in this Manual. Use a pleasant, clear voice, and try to avoid any feeling of tension.

(Before the testing period, write the name of each child, and the date, in the blanks at the bottom of Page 1. After the pupils are seated, hand out the test booklets to the proper children, as you say:) Today we are going to begin playing a new game. It will be fun for all of us. I will tell you what to do as soon as we are all ready to begin. Don't you think that the colors are pretty, Betsy?... Who can tell me the names of the colors?... **(Hand out pencils — or crayons, if your children are not accustomed to handling pencils.)** Let's all try to be neat when we mark our papers. I will tell you what to mark. You will use your pencil (or crayon). **(Glance about the room to make sure that each child has Page 1 facing up.)**

★Practice. **(Hold up a copy of the test, and point to the top left-hand box, as you say:)** Put your finger on the red box at the top of the page, here. . . . It has words in it. **(Point to the word in the little box at the left, as you say:)** The first word is in a little red box by itself. I will draw a line under that first word, like this. **(Draw.)** You do that now on your paper. . . . **(Illustrate as you say:)** Now, I will slide my finger to the next word, here. You do that. . . . Look at that word. Is it like the word in the little box? . . . Yes, it is, so draw a line under it to show that it is like the word in the little box. . . . Move your finger to the next word. Is that word like the word in the little box? . . . No, it is not like the word in the little box, so do not draw a line under it. Move your finger to the next word. Is that word like the word in the little box? . . . No, it is not, so do not draw a line under it. Move your finger to the last word. Is that word like the word in the little box? . . . No, it is not, so do not draw a line under it.

★Practice. **(Illustrate as you say:)** Move your finger down to the blue box under the red box, here. . . . **(Point to the word in the little box at the left, as you say:)** The first word is in a little box by itself. I will draw a line under that first word, like this. **(Draw.)** You do that now on your paper. . . . **(Illustrate as you say:)** Now, I will slide my finger to the next word, here. You do that. . . . Look at that word. Is it like the word in the little box? . . .

No, it is not like the word in the little box, so do not draw a line under it. Move your finger to the next word. Is it like the word in the little box? . . . No, it is not, so do not draw a line under it, either. Move your finger to the next word. Is it like the word in the little box? . . . Yes, it is, so draw a line under it to show that it is like the word in the little box. . . . Move your finger to the last word. Is that word like the word in the little box? . . . No, it is not, so do not draw a line under it.

1. Move your finger down to the yellow box under the blue box. . . . Look at the word in the little box. Draw a line under it. . . . Slide your finger along the box. Look at every word. Find one word that is like the word in the little box. Draw a line under that word to show that it is like the word in the little box. . . . **(Give no further help. Wait until all the children who should be able to do this work have completed it before beginning the next item. There is no time limit for each item, but do not keep the whole class waiting for one or two children who are too immature to follow the directions.)**

2. Move your finger down to the red box under the yellow box. . . . Draw a line under the word in the little box. . . . Slide your finger along the box. Draw a line under one word that is like the word in the little box. . . . **(Pause while your directions are being carried out.)**

3. Move your finger down to the yellow box under the red box. . . . Draw a line under the word in the little box. . . . Slide your finger along the box. Draw a line under one word that is like the word in the little box. . . .

4. Move your finger down to the blue box under the yellow box. . . . Draw a line under the word in the little box. . . . Now, draw a line under one other word that is like the word in the little box. . . .

5. Move your finger down to the red box under the blue box. . . . Draw a line under the word in the little box. . . . Now, draw a line under one other word that is like the word in the little box. . . .

6. Move your finger down to the blue box at the bottom of the page. . . . Draw a line under the word in the little box. . . . Now, draw a line under the other word that is like the word in the little box. . . .

Directions for Administering (continued)

7. (Illustrate as you say:) Find the blue box at the top of the page, here. Put your finger on it. . . . (Check to make sure that each child has found the box at the top of the right-hand column of boxes.) Draw a line under the word in the little box. . . . Slide your finger along the box. Draw a line under the word that is like the word in the little box. . . . (Pause while your directions are being carried out.)

8. Move your finger down to the yellow box under the blue box. . . . Draw a line under the word in the little box. . . . Now, draw a line under one other word that is like the word in the little box. . . .

9. Move your finger down to the red box under the yellow box. . . . Draw a line under the word in the little box. . . . Now, draw a line under one other word that is like the word in the little box. . . .

10. Move your finger down to the blue box under the red box. . . . Draw a line under the word in the little box. . . . Now, draw a line under one other word that is like the word in the little box. . . .

11. Move your finger down to the red box under the blue box. . . . Draw a line under the word in the little box. . . . Now, draw a line under one other word that is like the word in the little box. . . .

12. Move your finger down to the yellow box under the red box. . . . Draw a line under the word in the little box. . . . Now, draw a line under one other word that is like the word in the little box. . . .

13. Move your finger down to the blue box under the yellow box. . . . Draw a line under the word in the little box. . . . Now, draw a line under one other word that is like the word in the little box. . . .

14. Move your finger down to the yellow box at the bottom of the page. . . . Draw a line under the word in the little box. . . . Now, draw a line under one other word that is like the word in the little box. . . .

As soon as you have finished marking the last box, put your pencil (or crayon) down. We are going to have a short rest and then we will do some more. (Have the children stand up, walk around the room, get drinks of water, or any other change of activity that you desire, and then resume the test.)

Directions for Scoring

Count the number of items that are correctly marked, except for the two starred Practice Exercises. Give no credit for any item in which more than one word in the big box is marked. (Note: Full credit should be allowed even if the word in the *small* box is not underlined. Full credit should also be allowed if the child uses some method of marking other than drawing a line under his choices, provided that there is no doubt about what word he intended to mark. If disregard for directions persists throughout the tests, a notation to this effect should be made on the Individual Pupil's Record Sheet — page 12 of the tests — under Other Recommendations.)

Enter the score for *Test I a* (14 possible) in the proper blank at the bottom of Page 1 of Booklet No. 1.

★ do	do	go	of	so
------	----	----	----	----

★ of	for	off	of	on
------	-----	-----	----	----

<u>how</u>	<u>how</u>	now	who	hot
------------	------------	-----	-----	-----

<u>man</u>	pan	<u>man</u>	many	men
------------	-----	------------	------	-----

<u>soon</u>	moon	<u>soon</u>	some	noon
-------------	------	-------------	------	------

<u>will</u>	well	with	<u>will</u>	till
-------------	------	------	-------------	------

<u>run</u>	ran	rub	sun	<u>run</u>
------------	-----	-----	-----	------------

<u>big</u>	pig	dog	<u>big</u>	boy
------------	-----	-----	------------	-----

<u>here</u>	there	<u>here</u>	her	hear
-------------	-------	-------------	-----	------

<u>horse</u>	<u>horse</u>	home	house	shore
--------------	--------------	------	-------	-------

<u>made</u>	make	<u>made</u>	male	wade
-------------	------	-------------	------	------

<u>stop</u>	spot	pots	tops	<u>stop</u>
-------------	------	------	------	-------------

<u>play</u>	pay	lay	plan	<u>play</u>
-------------	-----	-----	------	-------------

<u>where</u>	when	there	<u>where</u>	here
--------------	------	-------	--------------	------

<u>says</u>	said	rays	boys	<u>says</u>
-------------	------	------	------	-------------

<u>looked</u>	looking	locked	<u>looked</u>	
---------------	---------	--------	---------------	--

Directions for Administering

Turn each child's test booklet over so that Page 2 is facing up. Since this part of the test is a test to see how well children can work independently on tasks that they know how to do, you must not give any unauthorized help or encouragement. Follow the directions **exactly** as they are given below.

★ **Practice.** (Hold up a copy of the test and point to the top left-hand box, as you say:) Put your finger on the blue box at the top of the page, here: . . . Draw a line under the word in the little box, just as you did before. . . . Now, slide your finger along the box and look at each word. Is the first word like the word in the little box? . . . No, it is not, so do not draw a line under it. Is the next word like the word in the little box? . . . Yes, it is, so draw a line under it to show that it is like the word in the little box. . . . Is the next word like the word in the little box? . . . No, it is not, so do not draw a line under it. Is the last word like the word in the little box? . . . No, it is not, so do not draw a line under it, either.

Test. (Illustrate as you say:) Move your finger down to the next blue box. . . . Draw a line under the word in the little box. . . . Draw a line under the other word that is like the word in the little box. As soon as you have done this, do the next box. Do not wait for me to tell you to go ahead. Do all the boxes on this page. (Point to both columns of boxes, as you say:) Do all the blue boxes, here, first. Then do all the yellow boxes, here.

(After two minutes have elapsed, say:) Do not wait for me to tell you to go ahead. Do all the boxes on this page by yourself. Do not forget to do the yellow boxes after you have finished the blue boxes.

(Give no further directions. When all the children have ceased working, even if they have not marked all the boxes, say:) Put your pencil (or crayon) down. We will have another short rest and then we will play a different game. (Allow the children another brief period for relaxation and then resume the testing. During this time, turn over the test booklets so that Page 3 is facing up on the children's tables.)

Directions for Scoring

Count the number of items that are correctly marked, except for the one starred Practice Exercise. Give no credit if more than one word in each big box is marked.

Enter the score for *Test I b* (15 possible) in the blank at the bottom of Page 2.

★ <u>is</u>	as	is	in	so	<u>does</u>	goes	shoe	<u>does</u>	doe
<u>me</u>	am	my	<u>me</u>	he	<u>went</u>	<u>went</u>	sent	want	were
<u>you</u>	boy	yes	<u>you</u>	may	<u>name</u>	same	came	<u>name</u>	none
<u>had</u>	has	<u>had</u>	have	bad	<u>rode</u>	road	ride	<u>rode</u>	rod
<u>come</u>	home	<u>come</u>	comb	came	<u>pull</u>	put	play	dull	<u>pull</u>
<u>ball</u>	bell	doll	all	<u>ball</u>	<u>there</u>	here	their	<u>there</u>	them
<u>saw</u>	was	see	<u>saw</u>	now	<u>live</u>	love	hive	line	<u>live</u>
<u>no</u>	so	on	<u>no</u>	one	<u>bigger</u>	biggest	<u>bigger</u>	beggar	

★ **Practice.** (Check quickly to make sure that each child has Page 3 facing up in front of him. Hold up a copy of the test and point to the red box at the top of the page, as you say:) Point to the red box at the top of the page, here. . . . Find a streetcar, a chicken, and a fish. Listen carefully to what I am going to say: Paul almost fell out of the boat when he was trying to catch something. One picture in the box shows what Paul was trying to catch. Was it a streetcar? . . . No. Paul wouldn't be out in a boat if he were trying to catch a streetcar. Was it a chicken? . . . No, Paul wouldn't be out in a boat if he were trying to catch a chicken. Was it a fish? . . . Yes, Paul might fall out of a boat trying to catch a fish. I will draw a line under the fish to show that Paul could be trying to catch a fish when he almost fell out of the boat. (**Draw.**) You do that now on your paper. . . .

★ **Practice.** (Illustrate as you say:) Move your finger down to the blue box under the red box. . . . Find a bell, a bus, and a baby carriage. Listen: Children who live far away from school often ride to school in something. One picture shows what children often ride to school in. Could it be a bell? . . . No. Could it be a bus? . . . Yes. Draw a line under the bus to show that children who live far away from school often ride to school in a bus. . . . Do not draw a line under the bell or baby carriage. Children do not ride to school in bells or baby carriages.

1. Move your finger down to the yellow box under the blue box. . . . Find a cake of soap, a door-mat, and a towel. Listen: After Carl had washed his face and hands, his mother told him to wipe them on something. One picture shows what Carl was told to use. Draw a line under it. . . . (**Give no further help. Allow time for all the children who can be expected to do this item to complete their work before you begin the next item.**)

2. Move your finger down to the blue box under the yellow box. . . . Find a hammer, a baseball bat, and a workbench. Listen: Jim was making a bird house. His father said, "Be careful not to hit your finger with that tool." One picture shows what Jim was using. Draw a line under it. . . .

3. Move your finger down to the red box at the bottom of the page. . . . Find the rubbers, the earmuffs, and the mittens. Listen: Nancy's mother said, "It is a cold day and the wind is blowing. Your hands will freeze. Come and put on these." One picture shows what Nancy put on. Draw a line under it. . . .

4. (**Illustrate as you say:**) Point to the blue box at the top of the page, here. . . . Find the gloves, the socks, and the overshoes. Listen: Before Jane put on her shoes she put on something else. One picture shows what she put on before her shoes. Draw a line under it. . . .

5. Move your finger down to the yellow box under the blue box. . . . Find three pigs, a jack-knife, and a book. Listen: Tony opened something and

began to read a story. One picture shows what Tony had to open before he could begin to read. Draw a line under it. . . .

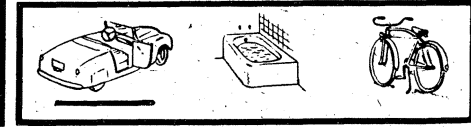
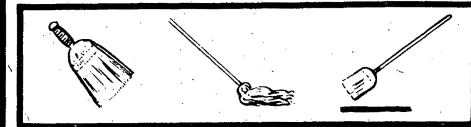
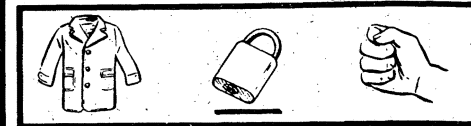
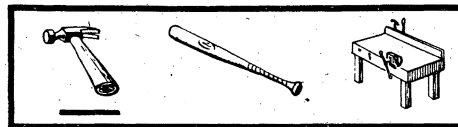
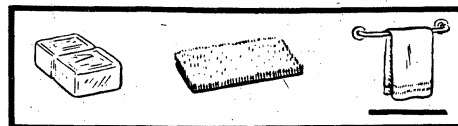
6. Move your finger down to the red box under the yellow box. . . . Find an overcoat, a lock, and a closed fist. Listen: Bill said, "Only the person who has the right key can open this." One picture shows what Bill was talking about. Draw a line under it. . . .

7. Move your finger down to the yellow box under the red box. . . . Find a brush, a mop, and a broom. Listen: Every day Eric swept the front walk. One picture shows what he used. Draw a line under it. . . .

8. Move your finger down to the blue box at the bottom of the page. . . . Find a car, a bathtub, and a bicycle. Listen: Sam ran out of the house in a great hurry and jumped into something. One picture shows what Sam jumped into. Draw a line under it. . . . (**As soon as this item has been marked, hold up your copy of the test, as you say:**) Turn the page over, like this. . . . (**Check to make sure each child has Page 4 facing up. Give help if it is needed in turning the page, and then continue with the directions for Page 4.**)

Directions for Scoring

When Page 4 is completed, add the score for Page 3 to the score for Page 4, not counting the two starred Practice Exercises on Page 3.



★ **Practice.** (Hold up a copy of the test and point, as you say:) Point to the yellow box at the top of the page, here. . . . Find a house, some telephone poles, and a fence. Listen: To get out of the yard, Don's dog had to jump over something. One picture in the box shows what the dog had to jump over. Was it the house? . . . No, Don's dog couldn't jump over a house, could he? Was it the telephone poles? . . . No, of course not. Telephone poles are not used to keep a dog in a yard, and a dog couldn't jump over them. Was it a fence? . . . Yes, to get out of the yard Don's dog would have to jump over the fence. I will draw a line under the picture of the fence to show that Don's dog would have to jump over the fence to get out of the yard. (Draw.) You do that now on your paper. . . .

9. Move your finger down to the blue box under the yellow box. . . . Find a bird, a bee, and a squirrel. Listen: The children saw something with a worm in its mouth flying to a nest. One picture shows what the children saw. Draw a line under it. . . . (Give no further help.)

10. Move your finger down to the red box under the blue box. . . . Find a cupboard, a mirror, and a fireplace. Listen: "Oh! I'd better wash my face," cried Peggy, as she looked into something. One picture shows what she looked into. Draw a line under it. . . .

11. Move your finger down to the blue box under the red box. . . . Find a dustpan, some clothespins, and a rake. Listen: Bill had been sawing some boards in the playroom. When he finished, Mother said, "Help me clean up this mess, Bill. Please get me the broom." She asked him to get her something else, too. One picture shows what else Mother wanted. Draw a line under it. . . .

12. Move your finger down to the yellow box at the bottom of the page. . . . Find a coffee pot, a spoon, and a piggy bank. Listen: Pearl was helping her mother get ready for lunch. She put something at each place at the table. One picture shows what Pearl put at each place. Draw a line under it. . . .

13. (Illustrate as you say:) Point to the red box at the top of the page, here. . . . Find the boots, the mittens, and a tricycle. Listen: Louis made some tracks on the living room rug with something that he was wearing. One picture shows what made the tracks. Draw a line under it. . . .

14. Move your finger down to the yellow box under the red box. . . . Find the shells, the stones, and a bottle. Listen: Mary found some things along the beach that were full of water. "I'll take these home for play dishes for my dolls," she said. One picture shows what Mary found. Draw a line under it. . . .

15. Move your finger down to the blue box under the yellow box. . . . Find a garage, a package, and a bed. Listen: Penny was very sleepy. She had been playing a long time. Her mother told her she would have to send her somewhere. One picture shows where Penny's mother was going to send her. Draw a line under it. . . .

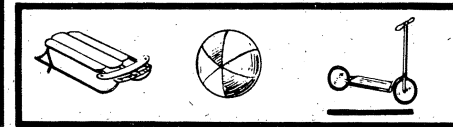
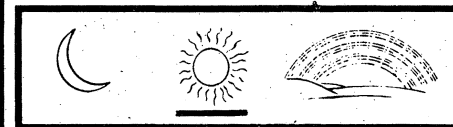
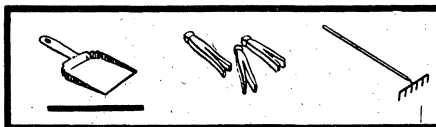
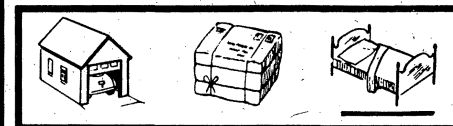
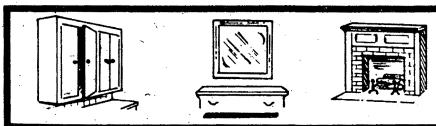
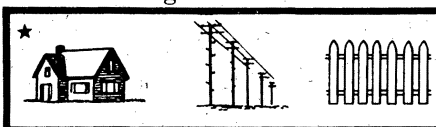
16. Move your finger down to the yellow box under the blue box. . . . Find the moon, the sun, and a rainbow. Listen: On clear days we can see something we cannot see at night or on cloudy days. Draw a line under it. . . .

17. Move your finger down to the red box at the bottom of the page. . . . Find a sled, a ball, and a scooter. Listen: Nick liked to roll down the hill on something he got for his birthday. One picture shows what Nick got for his birthday. Draw a line under it. . . . (When the children have finished marking the last item, say:) This is all that we will do today. Did you think this game was fun? . . . Did you like it better than the first game we played? . . . (Collect the children's test booklets as you and they talk about the test. Tests III and IV in Booklet No. 2 should not be administered until at least the next day.)

Directions for Scoring

Count the number of items that are correctly marked, except for the two starred Practice Exercises on Page 3 and the one starred Practice Exercise on Page 4. Give no credit for any item in which more than one picture is marked. Credit should be allowed if the child uses some method of marking other than drawing a line under his choices so long as they are clearly indicated.

Enter the score for Test II, Pages 3 and 4 (17 possible) in the blank at the bottom of Page 4.



(Before the testing period, write each child's name, and the date, in the blanks at the bottom of Page 5. When the pupils are seated, distribute the test booklets to the proper children, as you say:) Today we are going to play two new games. They are games with pictures. You will find that they are lots of fun. I will tell you how to play them just as soon as I hand out the pencils (or crayons). (Distribute the pencils, or crayons, as you say:) You were all such good workers yesterday. Let's see if you can be even better workers today.

(Glance about the room to make sure that each child has Page 5 facing up.)

★Practice. (Hold up a copy of the test and point to the red box at the top of the page, as you say:) Point to the big red box at the top of your page, here. . . . Find a bell, a bed, and a top. Let me see if everyone has found them. (Check quickly.) I will draw a line under the bell, like this. (Draw.) You do that now on your paper. . . . One of the other two things begins like bell. Listen to me say the names of the other two things. (Emphasize slightly the initial consonant sound, but do not separate it from the rest of the word, as you say:) *Bed. Top.* Think which one begins like bell. . . . Yes, bed begins like bell. Listen to me say them again. *Bed. Bell.* I will draw a line from the bell to the bed to show that bed begins like bell. (Draw.) You do that now on your paper. . . . Do not draw a line from the bell to the top. Top does not begin like bell.

★Practice. (Illustrate as you say:) Slide your finger along the red box. . . . Find a duck, a car, and a door. I will draw a line under the duck, like this. (Draw.) You do that now on your paper. . . . One of the other two things begins like duck. Listen to me say the names of the other two things. (Emphasize slightly the initial consonant sound, but do not separate it from the rest of the word, as you say:) *Car. Door.* Think which one begins like duck. . . . Yes, door begins like duck. Listen to me say them again. *Door. Duck.* I will draw a line from the duck to the door to show that door begins like duck. (Draw.) You do that now on your paper. . . . Do not draw a line from the duck to the car. Car does not begin like duck.

1. Slide your finger along the red box. . . . Find a radio, a turkey, and a rabbit. Draw a line under the radio. . . . One of the other things begins like radio. Draw a line from the radio to the other thing in the box that begins like radio. . . . (Give no further help. Allow time for all the children who can be expected to do each item to complete their work before you begin the next item.)

2. (Illustrate:) Point to the big yellow box under the red box. . . . Find a dog, a doll, and a hat. Let me see if everyone has found them. (Check quickly.) Draw a line under the dog. . . . One of the other things begins like dog. Draw a line from the dog to the other thing in the box that begins like dog. . . .

3. Slide your finger along the yellow box. . . . Find a leaf, a rug, and a lamb. Draw a line under the leaf. . . . One of the other things begins like leaf. Draw a line from the leaf to the other thing in the box that begins like leaf. . . .

4. Slide your finger along the yellow box. . . . Find a soldier, a sandwich and a dustpan. Draw a line under the soldier. . . . One of the other things begins like soldier. Draw a line from the soldier to the other thing in the box that begins like soldier. . . .

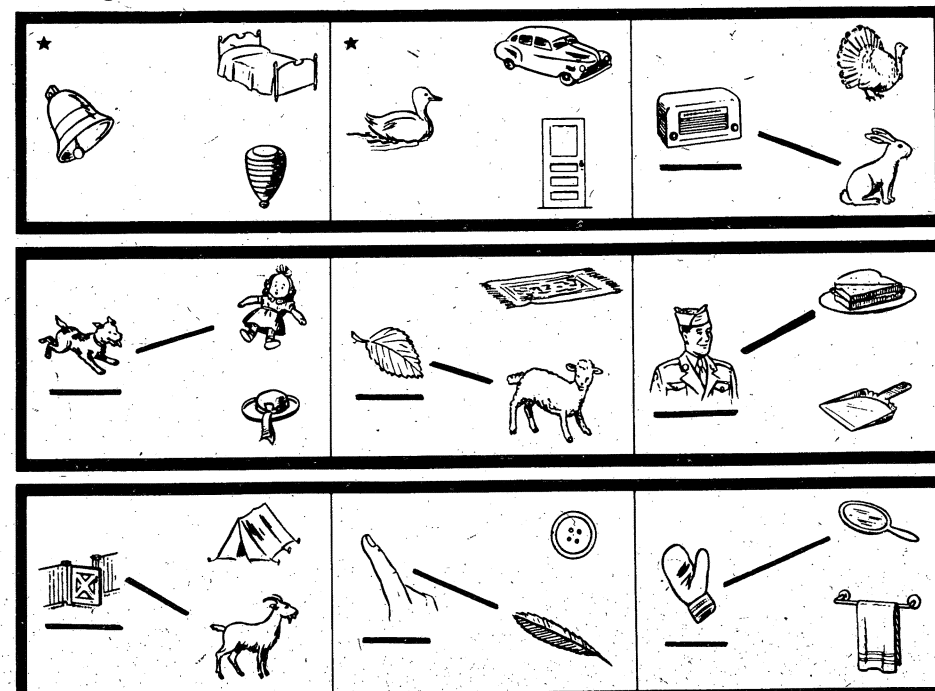
5. (Illustrate as you say:) Point to the big blue box at the bottom of the page. . . . Find a gate, a tent, and a goat. Draw a line under the gate. . . . One of the other things begins like gate. Draw a line from the gate to the other thing in the box that begins like gate. . . .

6. Slide your finger along the blue box. . . . Find a finger, a button, and a feather. Draw a line under the finger. . . . One of the other things begins like finger. Draw a line from the finger to the other thing in the box that begins like finger. . . .

7. Slide your finger along the blue box. . . . Find a mitten, a mirror, and a towel. Draw a line under the mitten. . . . One of the other things begins like mitten. Draw a line from the mitten to the other thing in the box that begins like mitten. . . . (As soon as the children have finished marking this item, hold up your test booklet, and say:) Turn the page over, like this. . . . (Check to make sure that each child now has Page 6 facing up in front of him. Give help if it is needed in turning the page, and then continue with the directions for Page 6.)

Directions for Scoring

When Page 6 is completed, add the score for Page 5 to the score for Page 6, not counting the two starred Practice Exercises on Page 5.



★**Practice.** (When the page has been turned correctly, say:) Point to the big yellow box at the top of the page, here. . . . Find a comb, a fork, and a coat. Let me see if everyone has found them. (**Check quickly.**) I will draw a line under the comb, like this. (**Draw.**) You do that now on your paper. . . . One of the other two things begins like comb. Listen to me say the names of the other two things. *Fork. Coat.* Think which one begins like comb. . . . Yes, coat begins like comb. Listen to me say them again. Coat. Comb. I will draw a line from the comb to the coat to show that coat begins like comb. (**Draw.**) You do that now on your paper. . . . Do not draw a line from the comb to the fork. Fork does not begin like comb.

8. Slide your finger along the yellow box. . . . Find a book, a moon, and a bib. Draw a line under the book. . . . One of the other things begins like book. Draw a line from the book to the other thing in the box that begins like book. . . .

9. Slide your finger along the yellow box. . . . Find the rubbers, a ruler, and a window. Draw a line under the rubbers. . . . One of the other things begins like rubbers. Draw a line from the rubbers to the other thing in the box that begins like rubbers. . . .

10. (**Illustrate as you say:**) Point to the big blue box under the yellow box. . . . Find a nut, a nose, and a pan. Let me see if everyone has found them. (**Check quickly.**) Draw a line under the nut. . . . One of the other things begins like nut. Draw a line from the nut to the other thing in the box that begins like nut. . . .

11. Slide your finger along the blue box. . . . Find a can, a cow, and a gun. Draw a line under the can. . . . One of the other things begins like can. Draw a line from the can to the other thing in the box that begins like can. . . .

12. Slide your finger along the blue box. . . . Find a pie, a ball, and a pen. Draw a line under the pie. . . . One of the other things begins like pie. Draw a line from the pie to the other thing in the box that begins like pie. . . .

13. (**Illustrate as you say:**) Point to the big red box at the bottom of the page. . . . Find a table, a turtle, and a candle. Draw a line under the table. . . . One of the other things begins like table. Draw a line from the table to the other thing in the box that begins like table. . . .

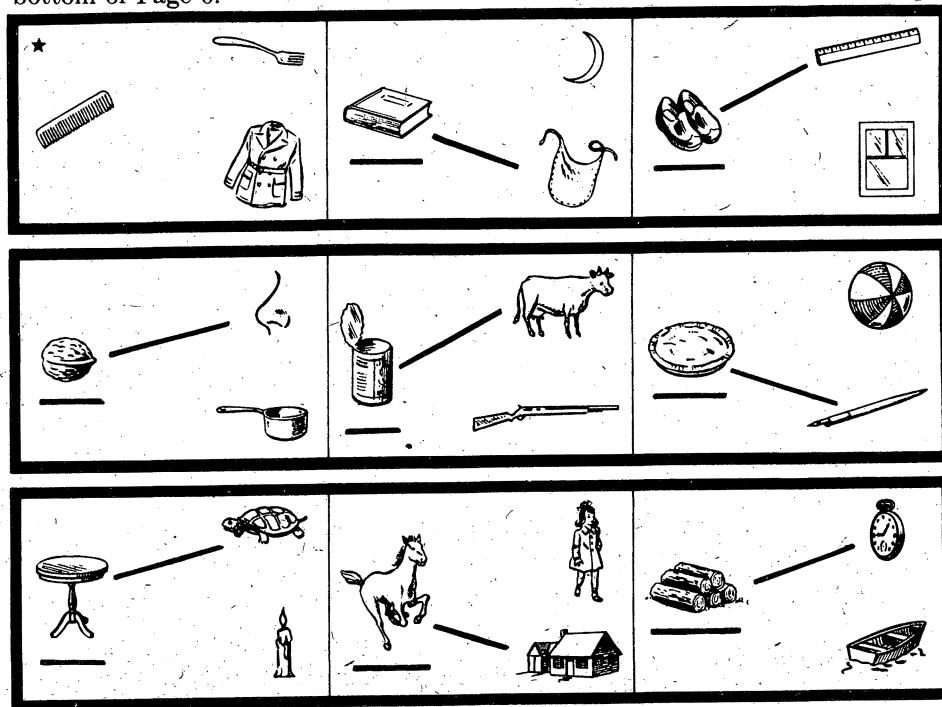
14. Slide your finger along the red box. . . . Find a horse, a girl, and a house. Draw a line under the horse. . . . One of the other things begins like horse. Draw a line from the horse to the other things in the box that begins like horse. . . .

15. Slide your finger along the red box. . . . Find the wood, a watch, and a boat. Draw a line under the wood. . . . One of the other things begins like wood. Draw a line from the wood to the other thing in the box that begins like wood. . . . (**When the children have finished marking the last box, say:**) Put down your pencil (or crayon). We will have a short rest and then we will play another game. (**Give the children a brief period for relaxation and then resume the testing.** During this time, turn over the test booklets so that Page 7 is facing up on the children's tables.)

Directions for Scoring

Count the number of items that are correctly marked, except for the two starred Practice Exercises on Page 5 and the one starred Practice Exercise on Page 6. Give no credit for any item in which more than one line has been drawn between pictures. (Full credit should be allowed even if the first picture at the left in each box is not underlined.)

Enter the score for *Test III*, Pages 5 and 6 (15 possible) in the blank at the bottom of Page 6.



★**Practice.** (Check quickly to make sure that each child has Page 7 facing up in front of him. Hold up a copy of the test and point to the red box at the top of the page, as you say:) Point to the red box at the top of the page, here. . . . Find a bottle, a top, and a boat. Let me see if everyone has found them. (Check quickly.) Listen carefully to what I am going to say: Bob's sister gave him a toy for his birthday when he was six. What two things in the pictures could Bob's sister have given him? . . . Yes, she could have given him a top or a boat. The toy that she gave Bob begins like his name. Which one did Bob's sister give him? . . . Yes, it was a boat. Boat begins like Bob. I will draw a line under the boat. (Draw.) You do that now on your paper. . . .

★**Practice.** (Illustrate as you say:) Move your finger down to the blue box under the red box. . . . Find a dog, a desk, and a rabbit. Listen: Dot had a pet which she fed every day. What two things in the pictures could Dot's pet have been? . . . Yes, Dot's pet could have been either a dog or a rabbit. Dot's pet begins like her name. Which one was Dot's pet? . . . Yes, it was a dog. Dog begins like Dot. Draw a line under the dog on your paper. . . .

1. Move your finger down to the yellow box under the blue box. . . . Find a ring, a rabbit, and a calf. Listen: Roy had two pets on his grandfather's farm. One pet ran away. The pet that ran away begins like Roy's name. Draw a line under the picture of the pet that ran away. . . . (Give no further help. Allow time for all the children who can be expected to do each item to complete their work before you begin the next item.)

2. Move your finger down to the blue box under the yellow box. . . . Find a basket, a balloon, and a wagon. Listen: Bob brought the things home from the store in something. What Bob used begins like his name. Draw a line under the picture of what Bob used to bring the things home from the store. . . .

3. Move your finger down to the red box at the bottom of the page. . . . Find a cup, a candle, and a lamp. Listen: When it got dark, Carl lighted something so he could see. What Carl lighted begins like his name. Draw a line under the picture of what Carl lighted. . . .

4. (Illustrate as you say:) Point to the blue box at the top of the page, here. . . . Find a fire, matches, and a monkey. Listen: Mack's fingers got burned because he played with something that he should not have played with. What burned Mack's fingers begins like his name. Draw a line under the picture of what burned Mack's fingers. . . .

5. Move your finger down to the yellow box under the blue box. . . . Find the toes, a kite, and a top. Listen: Tom got a present from his grandfather. What Tom got begins like his name. Draw a line under the picture of the present that Tom got. . . .

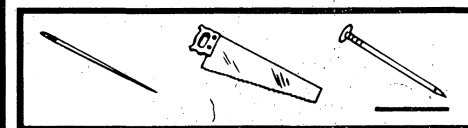
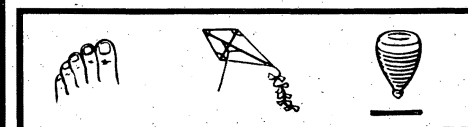
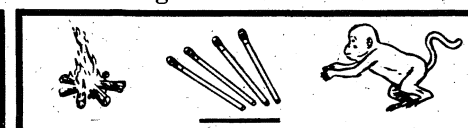
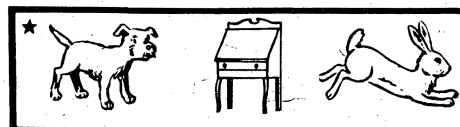
6. Move your finger down to the red box under the yellow box. . . . Find a needle, a saw, and a nail. Listen: Ned needed something to finish his bird house. What Ned needed begins like his name. Draw a line under the picture of what Ned needed. . . .

7. Move your finger down to the yellow box under the red box. . . . Find a hook, a horse, and a bicycle. Listen: Harry went for a ride. What Harry rode on begins like his name. Draw a line under the picture of what Harry rode on. . . .

8. Move your finger down to the blue box at the bottom of the page. . . . Find a duck, a door, and a window. Listen: It was so hot in the house that Dick opened something. What Dick opened begins like his name. Draw a line under the picture of what Dick opened. . . . (As soon as this item has been marked, hold up your copy of the test, as you say:) Turn the page over, like this. . . . (Check to make sure each child has Page 8 facing up. Give help if it is needed in turning the page, and then continue with the directions for Page 8.)

Directions for Scoring

When Page 8 is completed, add the score for Page 7 to the score for Page 8, not-counting the two starred Practice Exercises on Page 7.



Directions for Administering

★**Practice.** (Hold up a copy of the test and point, as you say:) Point to the yellow box at the top of the page, here. . . . Find a hand, a hill, and a tree. Let me see if everyone has found them. (Check quickly.) Listen: Harry went on a picnic. After he had eaten his lunch, he climbed something. What two things in the pictures could Harry climb? . . . Yes, he could climb a hill or a tree. The one that Harry climbed begins like his name. Which one did he climb? . . . Yes, it was a hill. Hill begins like Harry. Draw a line under the hill on your paper. . . .

9. Move your finger down to the blue box under the yellow box. . . . Find a door, a garden, and a gate. Listen: When Gail started to school she forgot to shut something. What Gail forgot to shut begins like her name. Draw a line under the picture of what Gail forgot to shut. . . .

10. Move your finger down to the red box under the blue box. . . . Find a fence, a foot, and a hand. Listen: Foster hurt himself one day. What Foster hurt begins like his name. Draw a line under the picture of what Foster hurt. . . .

11. Move your finger down to the blue box under the red box. . . . Find a light, a lollipop, and a stove. Listen: Lucy's mother went to the kitchen and turned on something. What she turned on begins like Lucy's name. Draw a line under what Lucy's mother turned on. . . .

12. Move your finger down to the yellow box at the bottom of the page. . . . Find pie, cake, and a pipe. Listen: Patty was hungry when she came home from school. She got something to eat. What Patty ate begins like her name. Draw a line under the picture of what Patty ate. . . .

13. (Illustrate as you say:) Point to the red box at the top of the page, here. . . . Find a table, a desk, and a turkey. Listen: Tom laid his book down on something. What Tom laid his book on begins like his name. Draw a line under the picture of what Tom laid his book on. . . .

14. Move your finger down to the yellow box under the red box. . . . Find a saw, socks, and a dress. Listen: Sue got wet coming home from school because it was raining. As soon as Sue got home she changed some of her clothing. What Sue changed begins like her name. Draw a line under the picture of what Sue changed. . . .

15. Move your finger down to the blue box under the yellow box. . . . Find coal, a window, and wood. Listen: Walter put something on the fire to make it burn better. What Walter put on the fire begins like his name. Draw a line under the picture of what Walter put on the fire. . . .

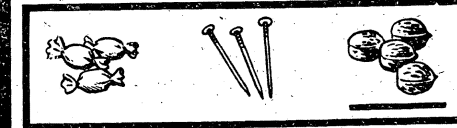
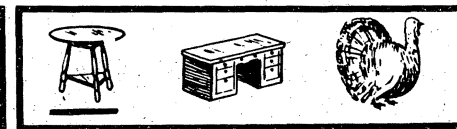
16. Move your finger down to the yellow box under the blue box. . . . Find a mop, mittens, and a skirt. Listen: Mary's mother made something for her to wear. What Mary's mother made begins like her name. Draw a line under the picture of what Mary's mother made. . . .

17. Move your finger down to the red box at the bottom of the page. . . . Find candy, nails, and nuts. Listen: Nancy's grandmother sent her a box of something good to eat. What Nancy got begins like her name. Draw a line under the picture of what Nancy got. . . . (When the children have finished marking the last item, say:) This is the end of today's game. Did you like it as well as the other games? . . . How many liked it better? . . . How many did not like it as well? . . . (Collect the children's test booklets as you and they talk about the test. Test V in Booklet No. 3 should not be administered until at least the next day.)

Directions for Scoring

Count the number of items that are correctly marked, except for the two starred Practice Exercises on Page 7 and the one starred Practice Exercise on Page 8. Give no credit for any item in which more than one picture is marked. Credit should be allowed if the child uses some method of marking other than drawing a line under his choices.

Enter the score for Test IV, Pages 7 and 8 (17 possible) in the blank at the bottom of Page 8.



Directions for Administering

(Before the testing period, write each child's name, the date of completing the tests, and other pertinent information in the blanks at the top of the back page of Booklet No. 3. This is the Individual Pupil's Record Sheet on which the data from all five tests will be assembled and plotted. When the pupils are seated, distribute the test booklets to the proper children, placing them so that Page 9 is facing up, as you say:) Today we are going to play another new game. I will show you how to play it as soon as I hand out the pencils (or crayons). (Distribute the pencils, or crayons, as you check that each child has Page 9 facing up.)

★**Practice.** (Hold up a copy of the test and point, as you say:) Point to the little red box at the top of the page, here. . . . Find a tree and a book. Under the tree is the word that stands for tree. Under the book is the word that stands for book. Find things that will help you remember what each word looks like. (Pause for approximately 5 seconds. If a watch is not available, count to 5 at the rate of 1 count per second.) Here in the big red box are the same two words, and here are three pictures. I will draw a line from the top word to the picture in the same big box which that word stands for. (Point to the appropriate words and pictures, as you say:) The top word is like the word under the book, here, so I drew the line to the book, here. You do that now on your paper. . . .

★**Practice.** Now I will draw a line from the bottom word to the picture in the big box which that word stands for. (Point to the appropriate words and pictures, as you say:) The bottom word is like the word under the tree, here, so I drew the line to the tree, here. You do that now on your paper. . . .

1. Point to the little yellow box at the top of the page. . . . Find a gate and a dog. Under the gate is the word that stands for gate. Under the dog is the word that stands for dog. Find things that will help you remember what each word looks like. (Pause for approximately 5 seconds, then say:) In the big yellow box are the same two words and three pictures. Draw a line from the top word to the picture in the same box which that word stands for. Do not cross any lines and do not go into any other box. Stay in the big yellow box. . . . (Give no further help. Pause while the children are drawing the line.)

2. Now draw a line from the bottom word to the picture which that word stands for. . . .

3. Point to the little blue box at the bottom of the page. Find an apple and a nest. Under the apple is the word that stands for apple. Under the nest is the word that stands for nest. Find things that will help you remember what each word looks like. (Pause for approximately 5 seconds.) In the big blue box are the same two words and three pictures. Draw a line from the top word to the picture in the same big blue box which that word stands for. Stay in the big blue box. . . .











4. Now draw a line from the bottom word to the picture which that word stands for. Stay inside the box. . . .











5. Point to the little red box at the bottom of the page. . . . Find a car and a clock. Under the car is the word that stands for car. Under the clock is the word that stands for clock. Find things that will help you remember what each word looks like. (Pause for approximately 5 seconds.) Here in the big red box are the same two words and three pictures. Draw a line from the top word to the picture in the same box which that word stands for. Stay inside the big red box. . . .

6. Now draw a line from the bottom word to the picture which that word stands for. . . . (As soon as the children have finished drawing the line, hold up your test booklet and say:) Turn the page over, like this. . . . (Check to make sure that each child now has Page 10 facing up in front of him. Give help if it is needed in turning the page and then continue with the directions for Page 10.)

Directions for Scoring

When Page 11 is completed, add the score for Page 9 to the score for Pages 10 and 11, not counting the two starred Practice Exercises on Page 9.

 tree  book	★ book  ★ tree  	 gate  dog	 gate  dog 
---	--	---	---

 apple  nest	 nest  apple 	 car  clock	 clock  car 
---	--	--	---

Directions for Administering

★**Practice.** (Hold up a copy of the test and point, as you say:) Point to the little blue box at the top of the page, here. . . . Find a chair and a hat. Under the chair is the word that stands for chair. Under the hat is the word that stands for hat. Find things that will help you remember what each word looks like. (Pause for approximately 5 seconds.) Here in the big blue box are the same two words, and here are three pictures. I will draw a line from the top word to the picture in the same big box which that word stands for. (Point to the appropriate words and pictures, as you say:) The top word is like the word under the hat, here, so I drew the line to the hat, here. You do that now on your paper. . . .

★**Practice.** Now I will draw a line from the bottom word to the picture in the big box which that word stands for. (Point to the appropriate words and pictures, as you say:) The bottom word is like the word under the chair, here, so I drew the line to the chair here. You do that now on your paper. . . .

7. Point to the little red box at the top of the page. . . . Find a bed and a shoe. Under the bed is the word that stands for bed. Under the shoe is the word that stands for shoe. Find things that will help you remember what each word looks like. (Pause for approximately 5 seconds.) In the big red box are the same two words and three pictures. Draw a line from the top word to the picture in the same box which that word stands for. . . . (Give no further help.)

8. Now draw a line from the bottom word to the picture which that word stands for. Stay inside the red box. . . .

9. Point to the little yellow box at the bottom of the page. . . . Find a bird and a flower. Under the bird is the word that stands for bird. Under the flower is the word that stands for flower. Find things that will help you remember what each word looks like. (Pause for approximately 5 seconds.) Here in the big yellow box are the same two words and three pictures. Draw a line from the top word to the picture in the same big box which that word stands for. . . .




















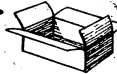
10. Now draw a line from the bottom word to the picture which that word stands for. . . .

11. Point to the little blue box at the bottom of the page. . . . Find a box and a boy. Under the box is the word that stands for box. Under the boy is the word that stands for boy. Find things that will help you remember what each word looks like. (Pause for approximately 5 seconds.) Here in the big blue box are the same two words and three pictures. Draw a line from the top word to the picture in the same box which that word stands for. . . .

12. Now draw a line from the bottom word to the picture which that word stands for. . . . (As soon as the children have finished drawing the line, hold up your test booklet and say:) Turn the page over, like this. . . . (Check to make sure that each child now has Page 11 facing up in front of him. Give help if it is needed in turning the page, and then continue with the directions for Page 11.)

Directions for Scoring

When Page 11 is completed, add the score for Page 10 to the score for Pages 9 and 11, not counting the two starred Practice Exercises on Page 10.

 chair  hat	★ hat ★ chair   	 bed  shoe	 bed  shoe 
 bird  flower	 flower  bird 	 box  boy	 box  box 

Directions for Administering

★**Practice.** (Hold up a copy of the test and point, as you say:) Point to the little yellow box at the top of the page, here. . . . Find a rabbit and a kitten. Under the rabbit is the word that stands for rabbit. Under the kitten is the word that stands for kitten. Find things that will help you remember what each word looks like. (Pause for approximately 5 seconds.) Here in the big yellow box are the same two words, and here are three pictures. I will draw a line from the top word to the picture in the same big box which that word stands for. (Point to the appropriate words and pictures, as you say:) The top word is like the word under the rabbit, here, so I drew the line to the rabbit, here. You do that now on your paper. . . .

★**Practice.** Now I will draw a line from the bottom word to the picture in the big box which that word stands for. (Point to the appropriate words and pictures, as you say:) The bottom word is like the word under the kitten, here, so I drew the line to the kitten, here. You do that now on your paper. . . .

13. Point to the little blue box at the top of the page. . . . Find a ball and a house. Under the ball is the word that stands for ball. Under the house is the word that stands for house. Find things that will help you remember what each word looks like. (Pause for approximately 5 seconds.) In the big blue box are the same two words and three pictures. Draw a line from the top word to the picture in the same box which that word stands for. . . . (Give no further help.)

14. Now draw a line from the bottom word to the picture which that word stands for. . . .

15. Point to the little red box at the bottom of the page. . . . Find a boy climbing a fence and a girl eating. Under the boy climbing a fence is the word that stands for climb. Under the girl eating is the word that stands for eat. Find things that will help you remember what each word looks like. (Pause for approximately 5 seconds.) In the big red box are the same two words and three pictures. Draw a line from the top word to the picture in the same box which that word stands for. . . .

16. Now draw a line from the bottom word to the picture which that word stands for. . . .




















17. Point to the little yellow box at the bottom of the page. . . . Find a girl jumping and a man riding on a horse. Under the girl jumping is the word that stands for jump. Under the man riding on a horse is the word that stands for ride. Find things that will help you remember what each word looks like. (Pause for approximately 5 seconds.) In the big yellow box are the same two words and three pictures. Draw a line from the top word to the picture in the same box which that word stands for. . . .

18. Now draw a line from the bottom word to the picture which that word stands for. . . . (When this last exercise has been marked, say:) This is the last of these games. Turn the page over, like this, so that the picture of a clown is facing up. (Collect the test booklets as you talk with the children about the various games that they have played and which ones they liked the best.)

Directions for Scoring

Count the number of exercises that are correctly marked on Pages 9, 10, and 11, except for the two starred Practice Exercises on each page. Give no credit for any exercises in which more than one line has been drawn from a word to the pictures. Each line that is correctly drawn to the proper picture is counted as one point.

Enter the score for *Test V*, Pages 9, 10, and 11 (18 possible) in the blank at the bottom of Page 11. Translate the point score for each test into a percentile score as explained on Page 4. Connect each point on the graph to complete the profile. Interpret the findings as suggested on Pages 5-7.

 rabbit	<div>★</div> <div>rabbit</div> <div>★</div> <div>kitten</div>   	 ball  house	<div>ball</div> <div>house</div>   
 climb  eat	<div>eat</div> <div>climb</div>   	 jump  ride	<div>jump</div> <div>ride</div>   

A black and white illustration of a man in a pointed hat and long coat, holding a large book and gesturing towards the word 'Reading'. The man is depicted in a dynamic, almost dancing pose, with one leg raised and arms outstretched. He is holding a large, thick book in his left hand. The background is simple, with a horizontal line and a decorative border. The word 'Reading' is written in a large, stylized font at the top of the page.

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[illegible]

SCORES

- I. Making Visual Discriminations**
- a. Attention Span Controlled _____
- b. Attention Span Uncontrolled _____
- II. Using the Context** _____
- III. Making Auditory Discriminations** _____
- IV. Using Context and Auditory Clues** _____
- V. Using Symbols** _____

Place pupil in Grade One Reading Group which moves:

rapidly _____ normally _____ slowly _____

Retain pupil in Non-reading Group in:

Grade One _____ Kindergarten _____ Transition _____

OTHER RECOMMENDATIONS:



rabbit



kitten



rabbit



kitten



ball

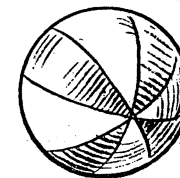


house



ball

house



climb



eat

eat

climb



jump



ride

jump

ride





tree



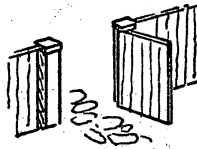
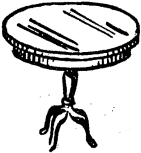
book



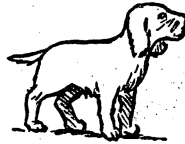
book



tree



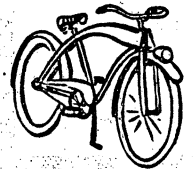
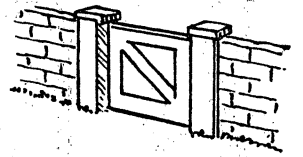
gate



dog

gate

dog



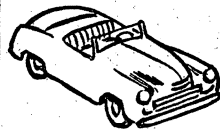
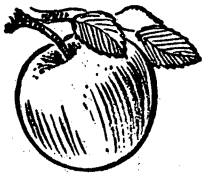
apple



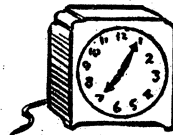
nest

nest

apple



car



clock

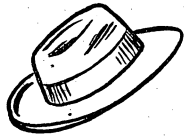
clock

car





chair



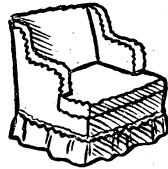
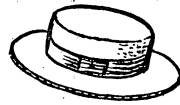
hat

★

hat

★

chair



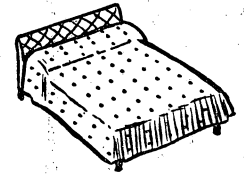
bed



shoe

bed

shoe



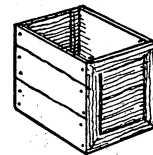
bird



flower

flower

bird



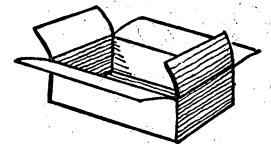
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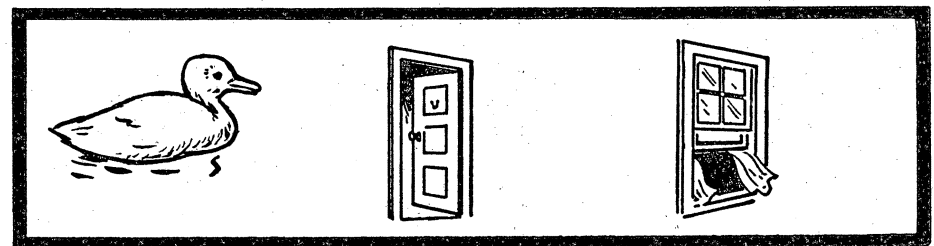
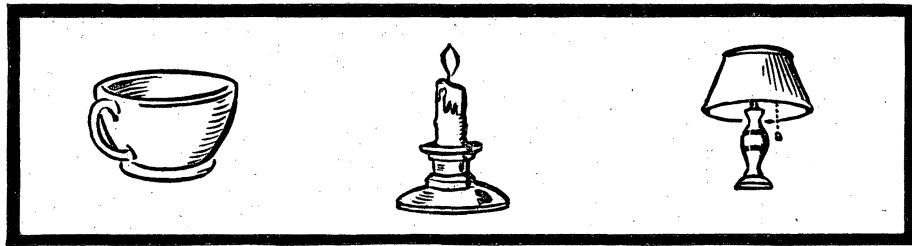
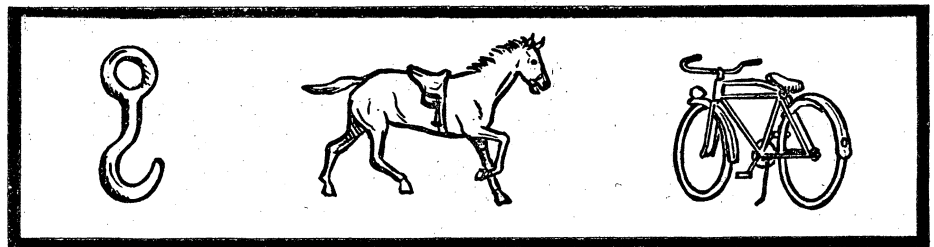
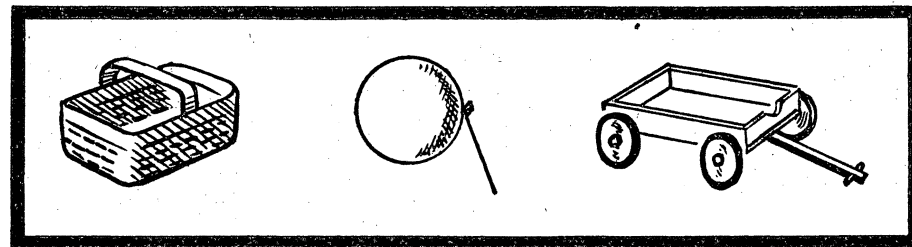
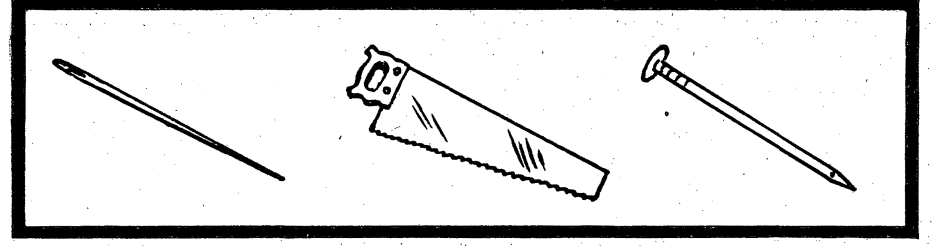
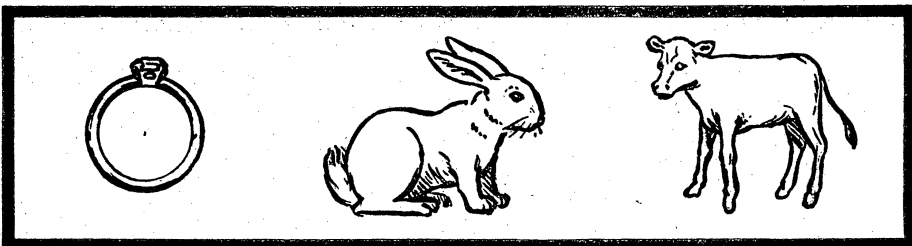
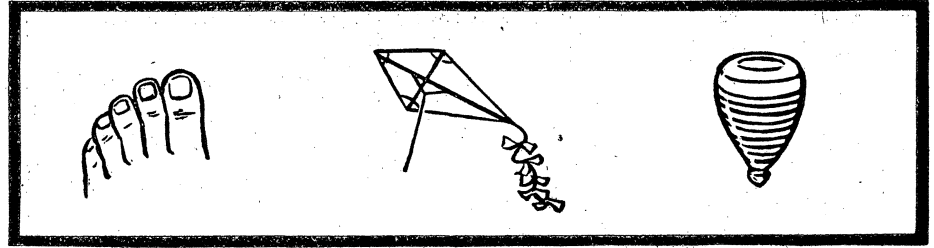
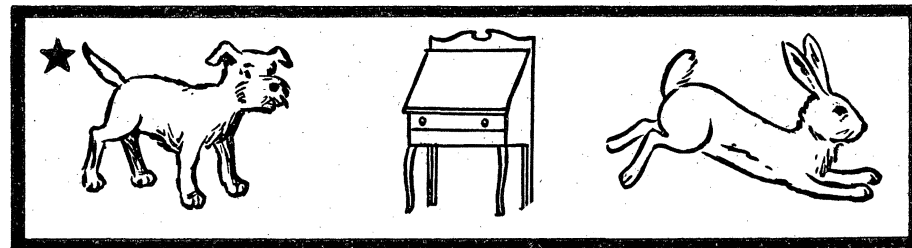
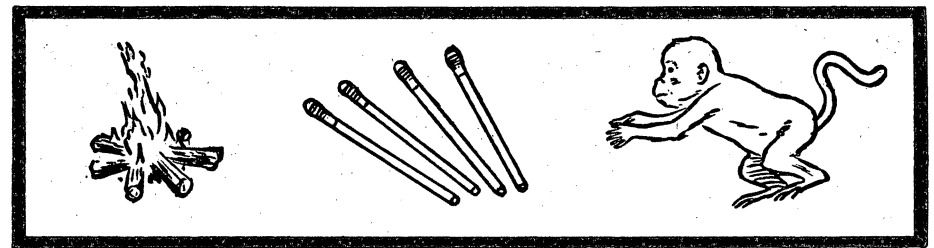
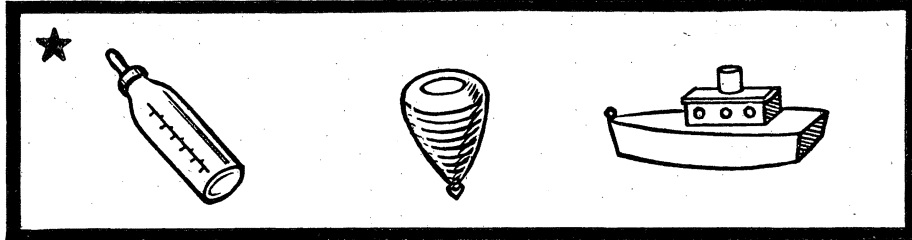


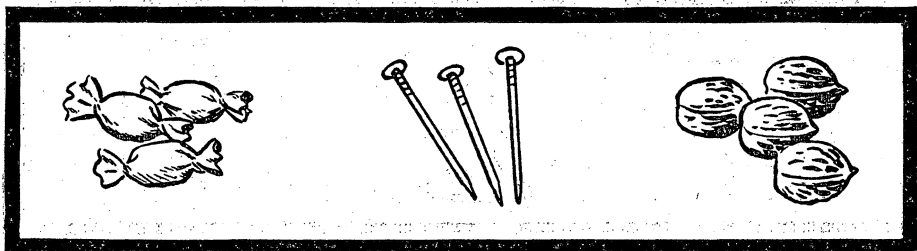
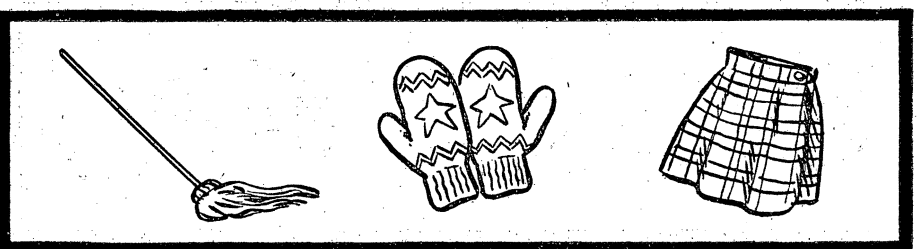
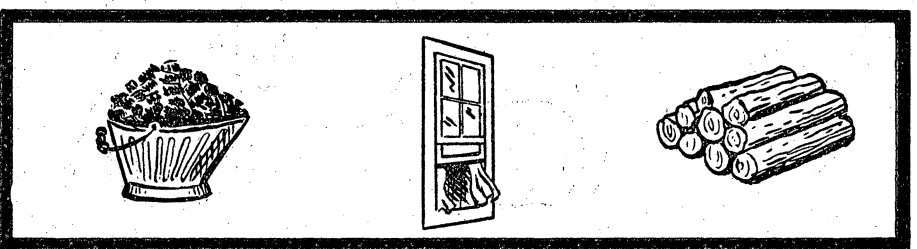
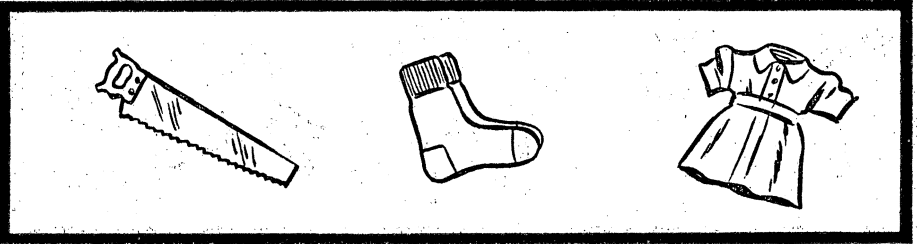
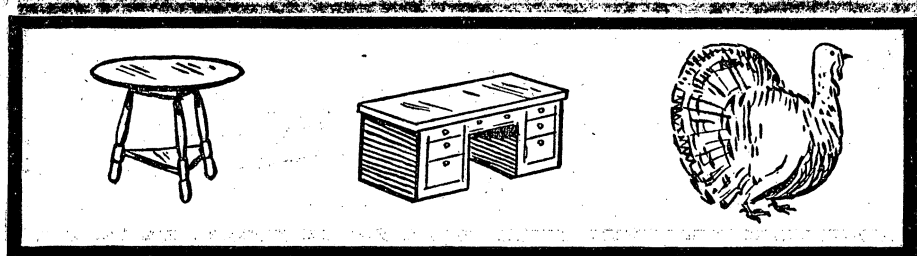
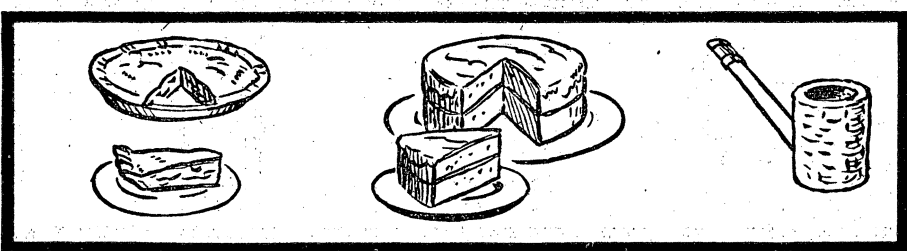
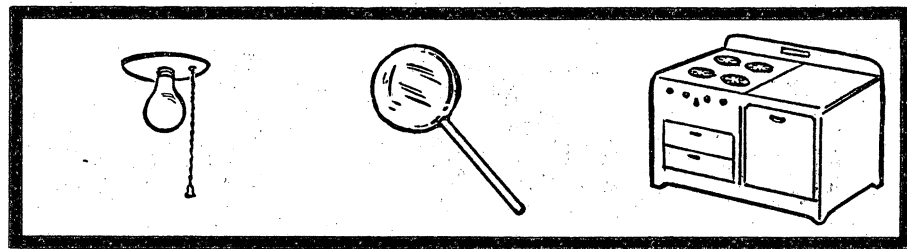
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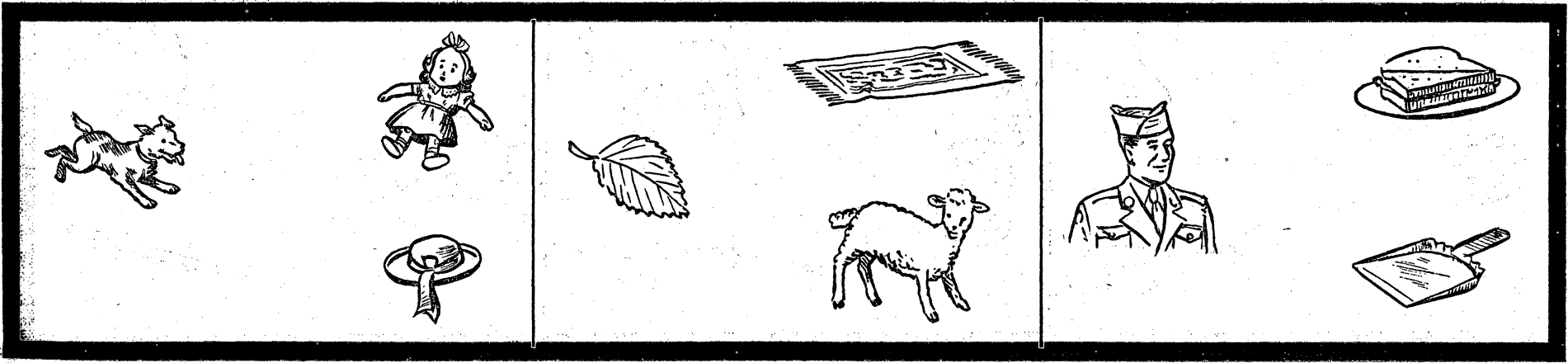
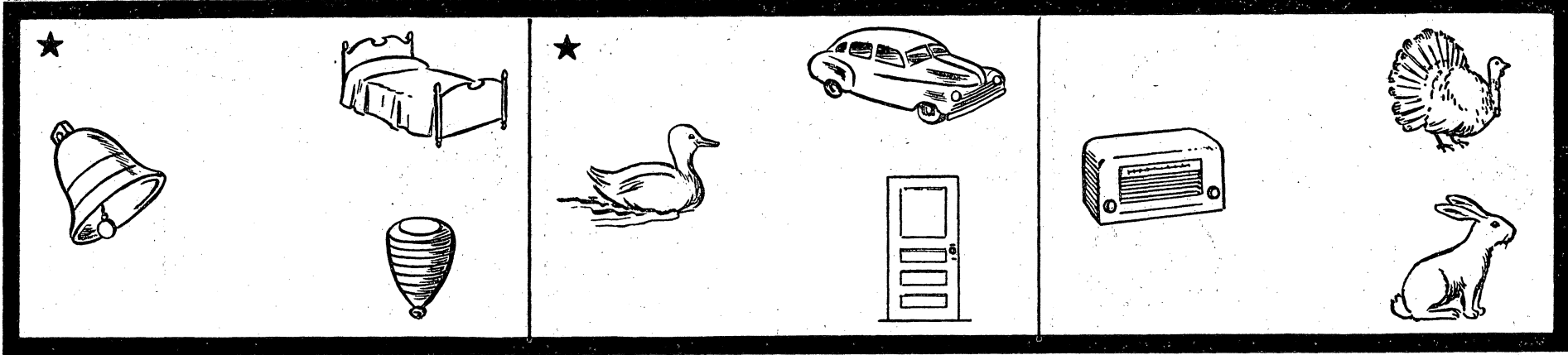
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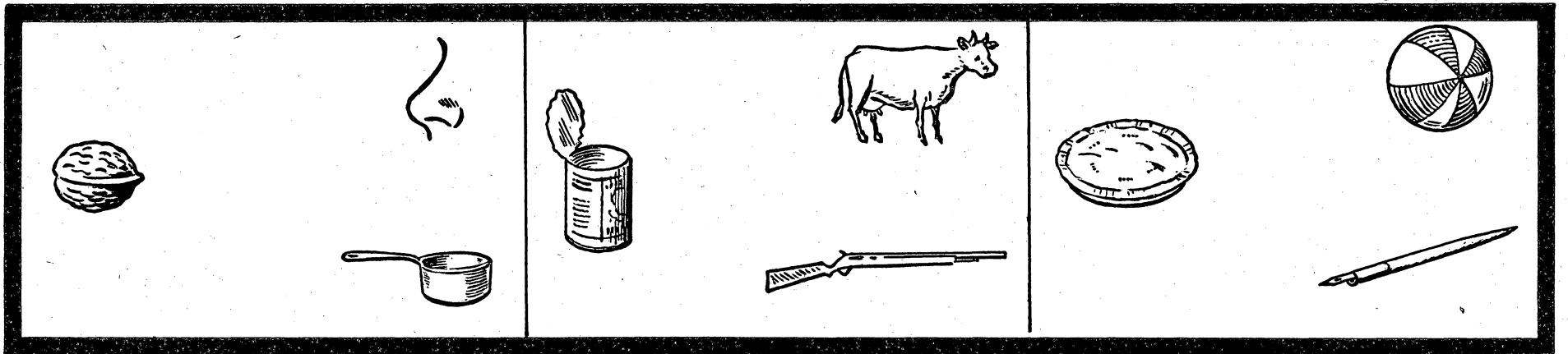
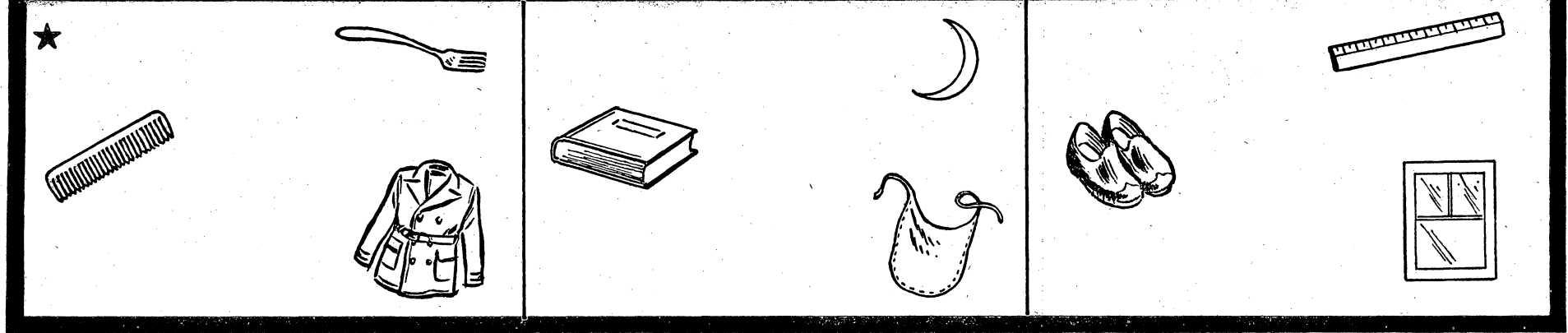
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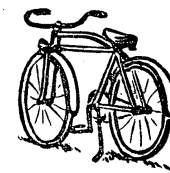
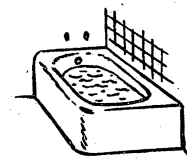
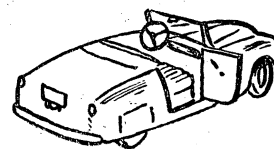
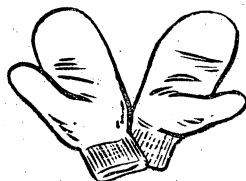
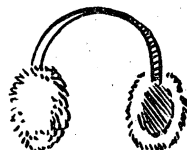
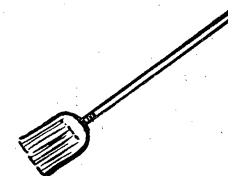
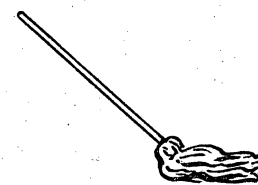
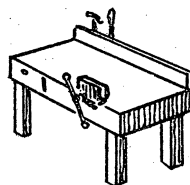
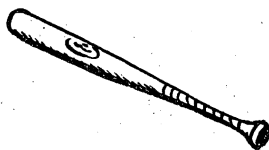
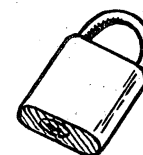
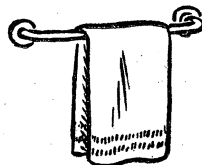
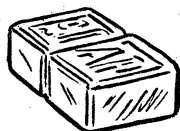
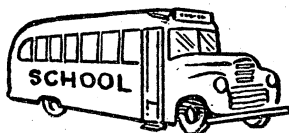
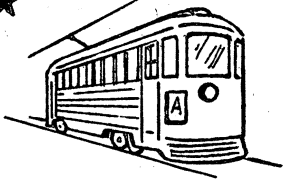


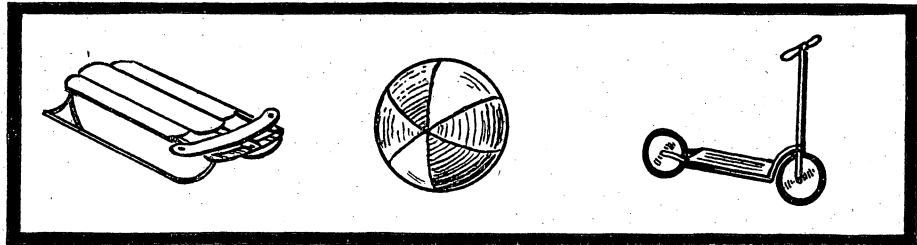
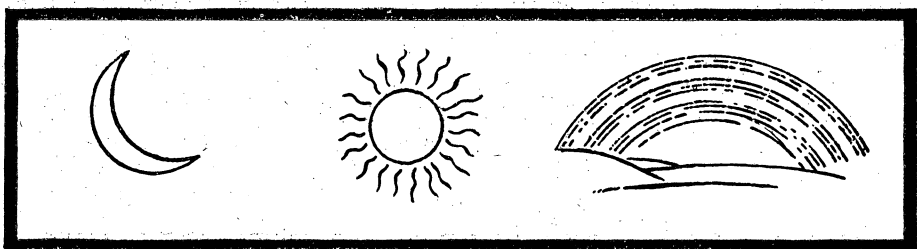
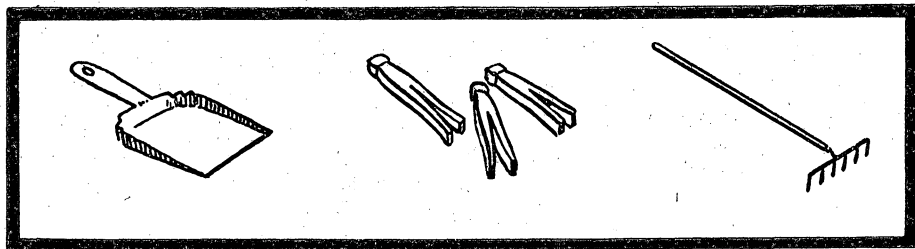
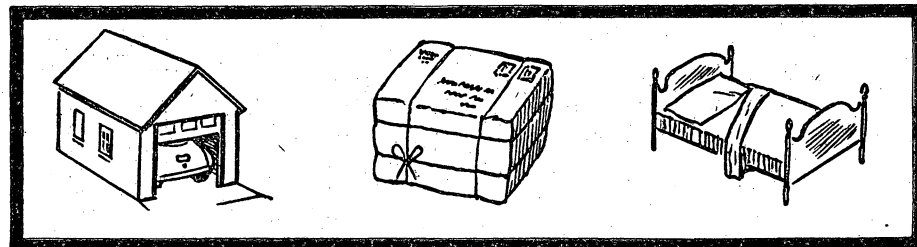
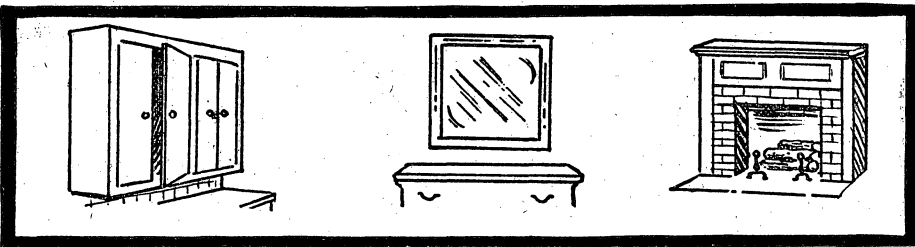
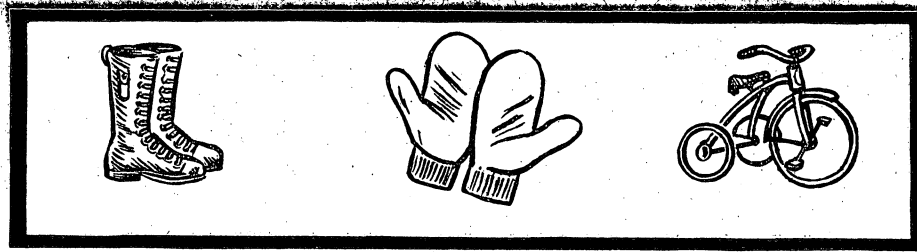
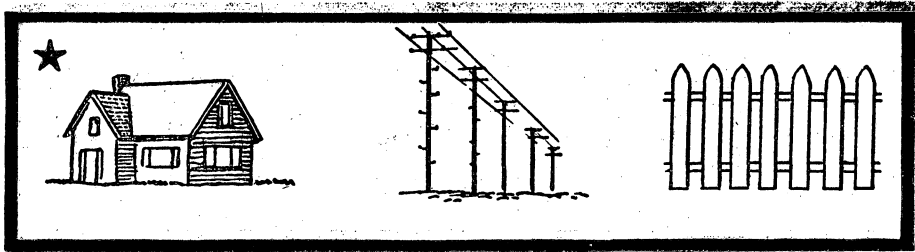






SCORE FOR TEST III, pages 5 and 6 (15 possible) _____
 (Do not count the 3 starred Practice Exercises)





★do do go of so

★of for off of on

how how now who hot

man pan man many men

soon moon soon some noon

will well with will till

run ran rub sun run

big pig dog big boy

here there here her hear

horse horse home house shore

made make made male wade

stop spot pots tops stop

play pay lay plan play

where when there where here

says said rays boys says

looked looking locked looked

★ is as is in so

me am my me he

you boy yes you may

had has had have bad

come home come comb came

ball bell doll all ball

saw was see saw now

no so on no one

does goes shoe does doe

went went sent want were

name same came name none

rode road ride rode rod

pull put play dull pull

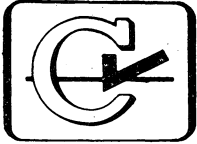
there here their there them

live love hive line live

bigger biggest bigger beggar

SCORE FOR TEST 1 b (15 possible) _____

(Do not count the 1 starred Practice Exercise)



Primary • GRADES 1 - 2 - 3 • 1953 S-Form

California Short-Form Test of Mental Maturity

Devised by

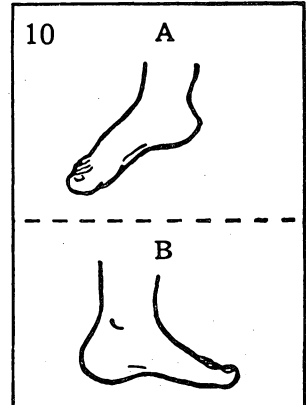
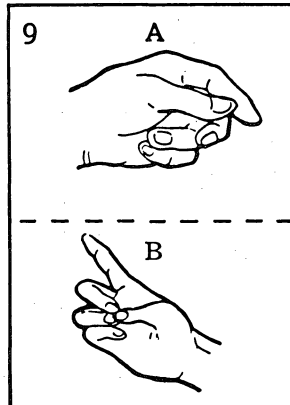
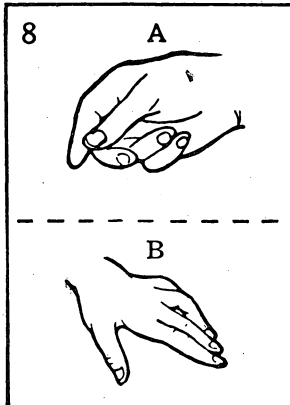
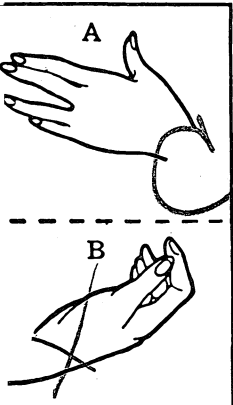
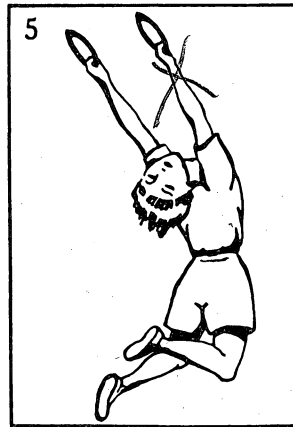
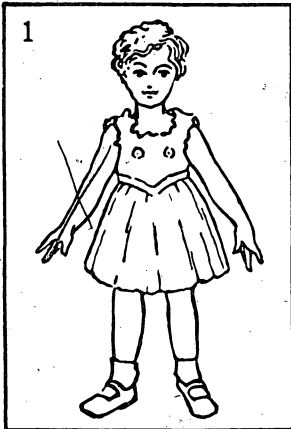
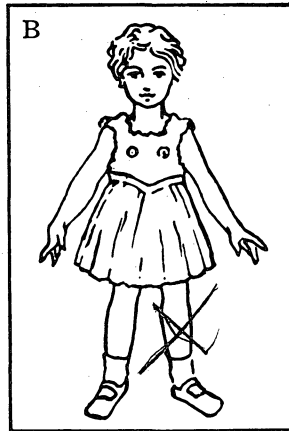
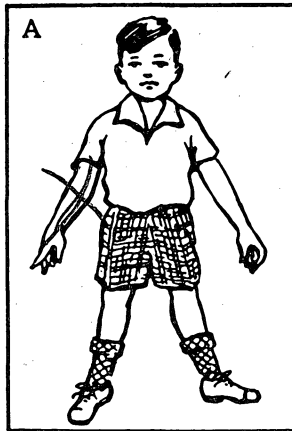
ELIZABETH T. SULLIVAN, WILLIS W. CLARK, AND ERNEST W. TIEGS

TO BOYS AND GIRLS:

This test booklet has some games you will like. They will show how well you can think. Do as many of them as you can.

DO NOT TURN THIS PAGE UNTIL TOLD TO DO SO.



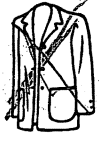





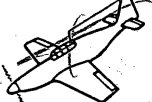

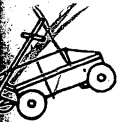
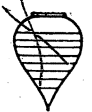




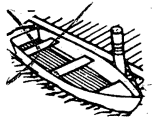




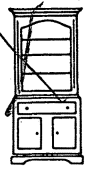






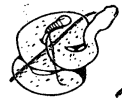



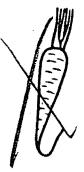

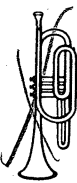

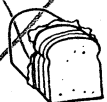


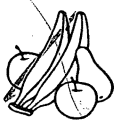

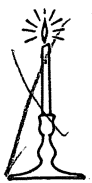











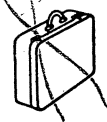




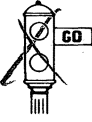
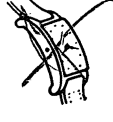





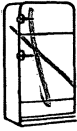



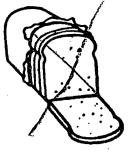
TEST 1.



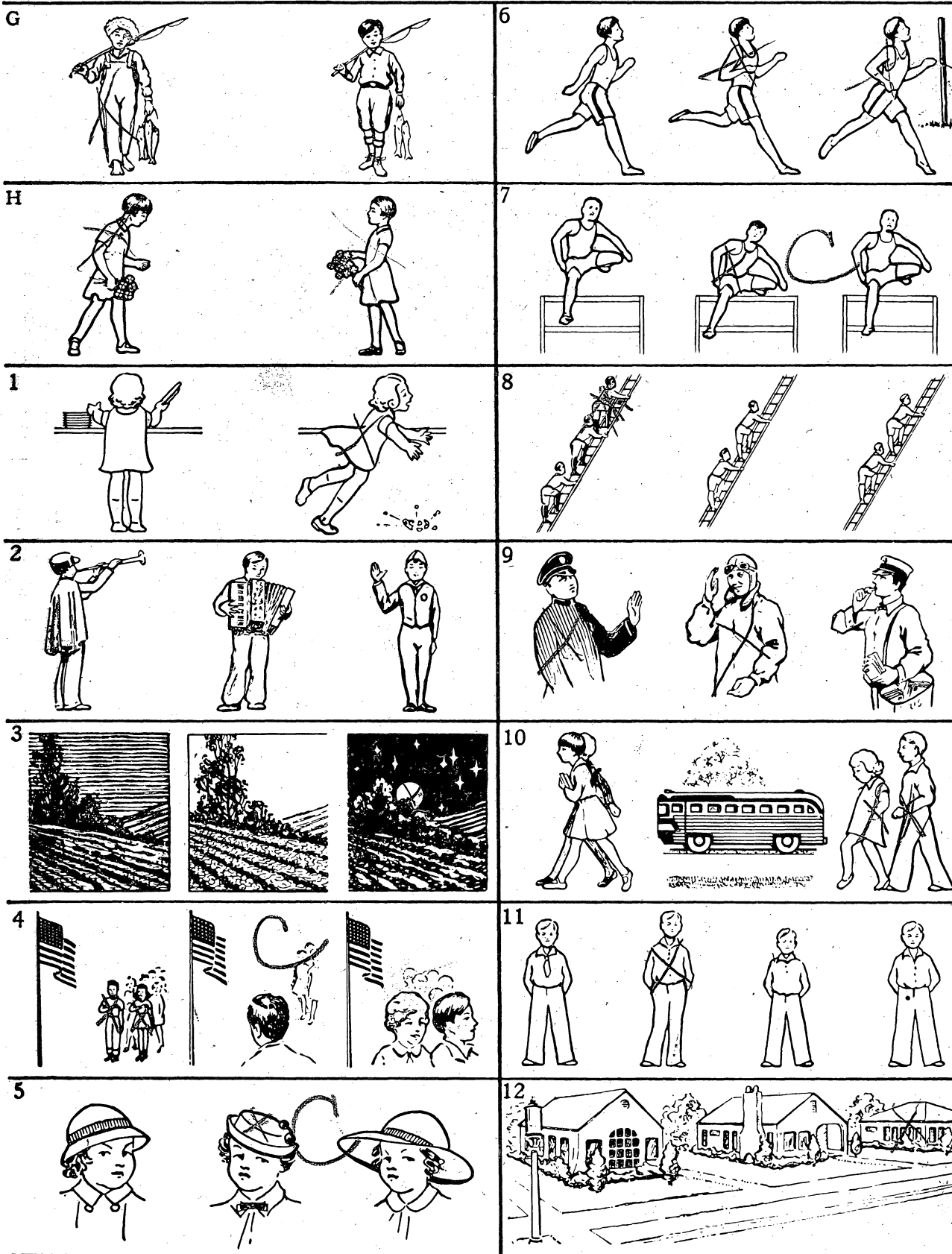
TEST 2.

<p>C</p>	<p>6</p>
<p>D</p>	<p>7</p>
<p>1</p>	<p>8</p>
<p>2</p>	<p>9</p>
<p>3</p>	<p>10</p>
<p>4</p>	<p>11</p>
<p>5</p>	<p>12</p>
<p>1 2 3</p>	<p>1 2 3</p>

TEST 3.

    	<p>6</p>     
    	<p>7</p>     
    	<p>8</p>     
    	<p>9</p>     
    	<p>10</p>     
    	<p>11</p>     
    	<p>12</p>     

TEST 4.



1

2

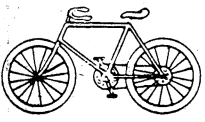
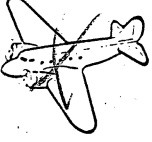

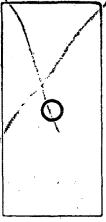
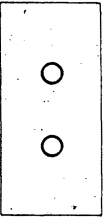
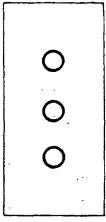
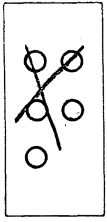
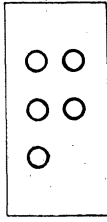



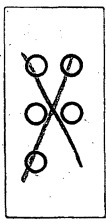
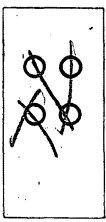
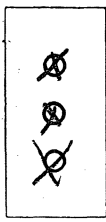
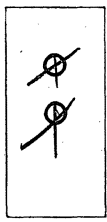
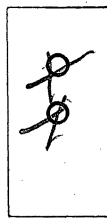

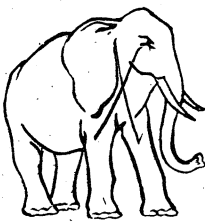

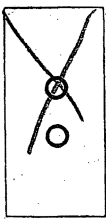
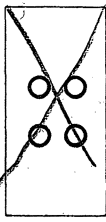
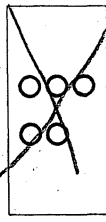
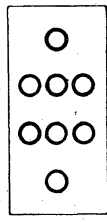
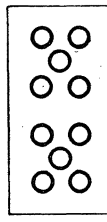

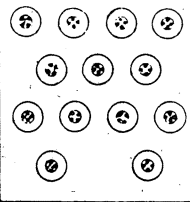

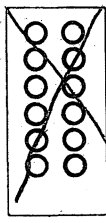
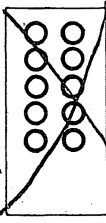
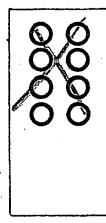
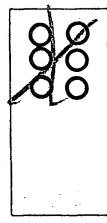
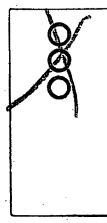
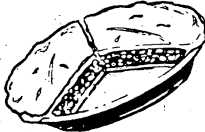
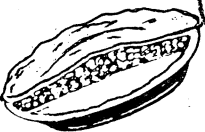
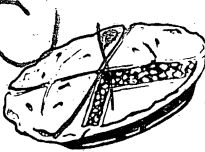
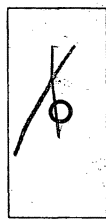
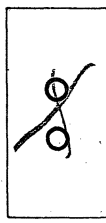
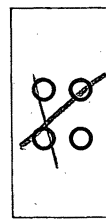
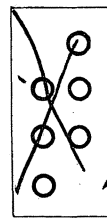
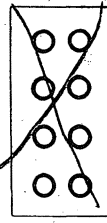
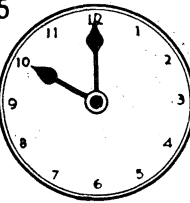
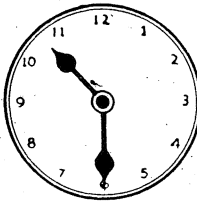
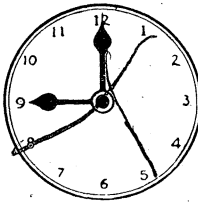
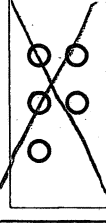
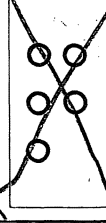
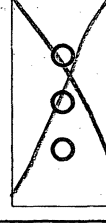
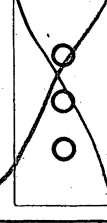
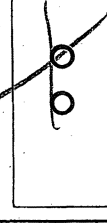
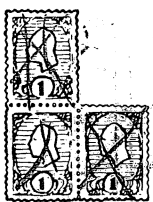


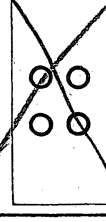
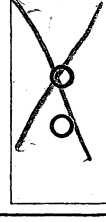
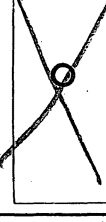


3

1

2

3

TEST 5.

  	<div>J</div>     						
<div>1</div>   	<div>1</div>     						
<div>2</div>   	<div>2</div>     						
<div>3</div>   	<div>3</div>     						
<div>4</div>   	<div>4</div>     						
<div>5</div>   	<div>5</div>     						
<div>6</div>   	<div>6</div>     						
<div>1</div>	<div>2</div>	<div>3</div>	<div>1</div>	<div>2</div>	<div>3</div>	<div>4</div>	<div>5</div>

TEST 6

K					6				
L					7				
1					8				
2					9				
3					10				
4					11				
5					12				

1

2

3

1

2

3

TEST 7



Test 7 Score
(number right) 12

GATES PRIMARY READING TESTS

For Grade 1 and Grade 2 (First Half)

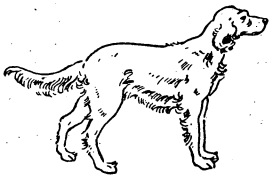
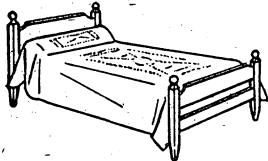
Type 1. Word Recognition



FORM 1

Write your name here

When is your birthday?..... How old are you?.....

Date School Grade

	did	egg
	dog	two
	be	bed
	bag	she

	may	make
	come	milk
	horse	play
	hose	house

To the Examiner: 1. See that each child has a pencil. 2. Distribute papers. 3. Have children fill in blanks at the top of the page (with your help). 4. Instructions to children: "I want you to look at the first picture, this one up here (holding up your copy and pointing to the picture of the dog). Next to it there are some words. One of the words goes with the picture. You are to draw a ring around that one word that tells about the picture. Put your finger on the word that belongs with the picture. What is it? (Let one child answer.) That's right, 'dog.' The four words are 'did,' 'egg,' 'dog,' and 'two' (pointing to the words on your own copy and making sure children look up at your copy). We are going to draw a ring around the word 'dog' because that's the one *that tells the most* about the picture. Everyone find the word 'dog' on your paper and draw a ring around it. (Check to make sure children have marked the correct word.) Now look at the box right underneath that one. Find the word there that goes with the picture. What is it? (Let a child answer.) That's right, 'bed.' The four words are 'be,' 'bed,' 'bag,' and 'she.' We are going to draw a ring around the word 'bed' because that's the one that tells us the most about the picture. Everyone find the word 'bed' and draw a ring around it. (Check to make sure that each child has marked the correct word. Continue in the same way for the third and fourth boxes. When you are illustrating with your copy ask children to look up if need be.)

Do not open your books until I tell you to. Now I am going to show what we are to do next. On the inside of the book are some more pictures and words. (Examiner holds up copy of the test showing the inner pages.) You are to do the first one, then the next one below it, etc. (Examiner points down first column, then second, etc., and also demonstrates order on all three pages.) As soon as you have drawn a ring around the one word for one picture, go right ahead and do the next one. Now remember, first you are to look at the picture, then at the words next to the picture, then find the one word that goes best with the picture and make a ring around that one word. Make a ring around one word only for each picture. Do you understand? All right. Open your books and BEGIN. Go ahead." 5. Inspect the work of each child; see that each works from top to bottom of columns and that each follows the pages in order. Urge children individually to try the examples in order but *do not tell them the answers*. Discourage dawdling over difficult problems; tell them to try the next. Watch for children who make rings indiscriminately and tell them to make only one ring for each picture. 6. The signal STOP is given at the end of **15 minutes**. Collect papers immediately. 7. The score is the number of exercises marked correctly minus one-third the number incorrect. If more than one word in an exercise is marked, that exercise is scored as incorrect. For further details see the Manual of Directions.



bed

boy

fly

not

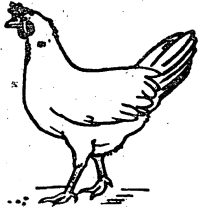


can

put

run

red



hen

has

pan

get



say

out

pig

sit

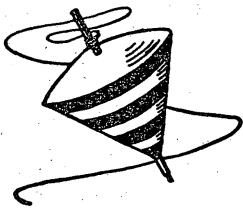


king

song

kite

find



top

try

hot

cap



want

hand

have

wind

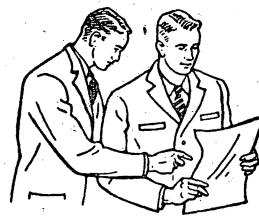


buy

fox

bow

new

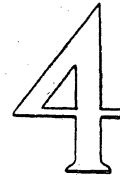


sea

men

sun

may

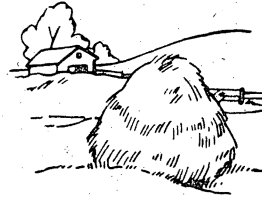


foot

soup

door

four

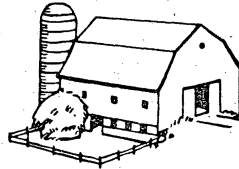


hay

how

fan

toy



dark

corn

barn

ball

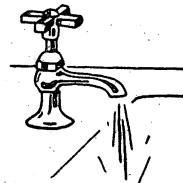


bell

bear

star

read



water

walks

paper

gates



keep

sleds

sleep

trees


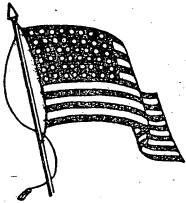
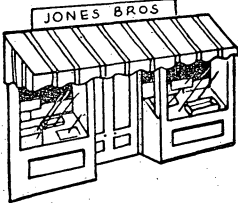


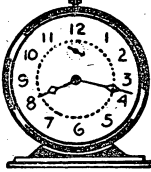








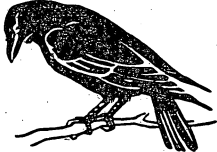
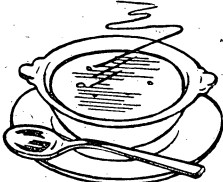
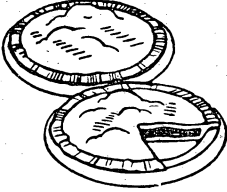
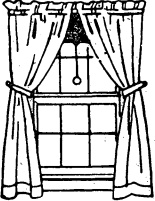
fans

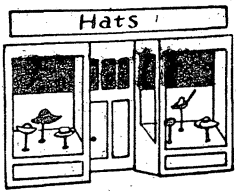
back

mice

face

	fix lip	lie tie
	frog floor	flag clap
	more story	stick store
	farmer father	falling warmer
	rats ran	rain again
	clock block	chalk clean
	grow bow	blow slow
	liking wanting	walking talked

	hear hair	said pair
	find sand	stand stair
	goat gold	boat road
	ride hill	hide made
	crow cow	drop across
	hour south	soup soap
	pick pies	rock pink
	winds finding	window throw



drop

shot

shop

stop



wheat

wheel

went

meat

12

town

throw

twelve

crow

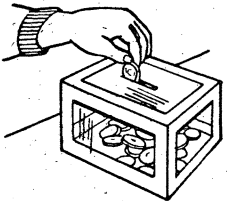


loaf

leaf

leave

left

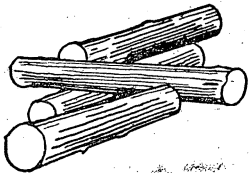


bark

band

bank

thank



wore

wood

fork

word

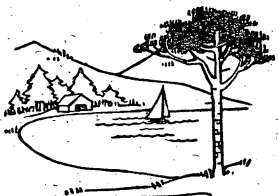


smile

smell

while

mile

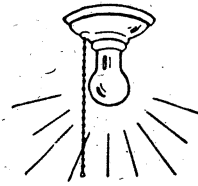


last

take

like

lake

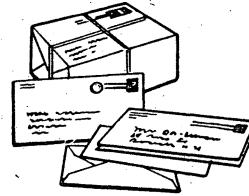


light

lost

fight

lifts

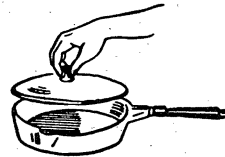


mile

maid

mail

nail



corner

cover

river

cocoa

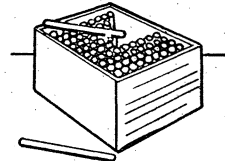


took

roof

room

root



change

talk

cluck

chalk

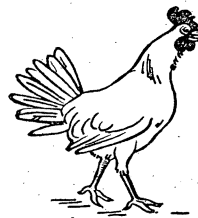


lies

lady

lily

only



rock

cock

cook

colt



drive

dirty

live

divide

GATES PRIMARY READING TESTS

For Grade 1 and Grade 2 (First Half)

Type 2. Sentence Reading

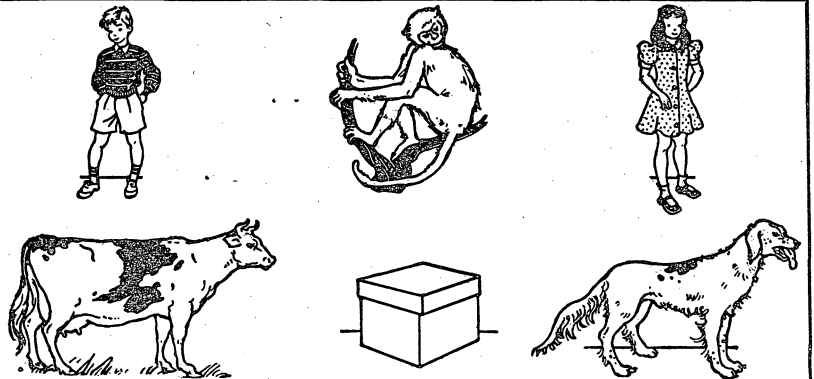
FORM 1

Write your name here
 When is your birthday? How old are you?
 Date School Grade

This is a boy. I

This is a girl. II

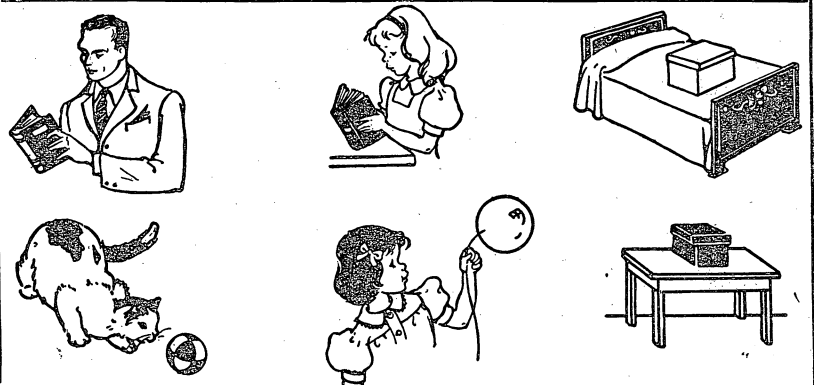
This is a box. III



The girl has a book. I

The box is on the bed. II

The cat has a ball. III



To the Examiner: 1. See that each child has a pencil. 2. Distribute papers. 3. Have children fill in blanks at top of page (with your help). 4. Instructions to children: "We are going to see how well you can read. Do you see the sentences and the pictures in the boxes on the front page of your booklet? Everyone look at the first sentence—up here (illustrating with your own copy). What does it say? (Have child read the sentence aloud.) Yes, it says 'This is a boy.' Now look at the pictures in the box beside the sentences. Which one tells the same thing (or story) as the sentence? Yes, that's right, the boy. Now notice the line at the end of this sentence, 'This is a boy.' How many lines are there? One. That is right. Now draw one line on the picture of the boy to show that it tells about this sentence, like this (illustrating with your own copy). (Check to see that they all have marked it correctly.) Now look at the second sentence. What does it say? (Have child read sentence aloud.) Yes, that is right, it says 'This is a girl.' Now find the picture that goes with this sentence. Which one is it? That's right, the picture of the girl. Put your finger on it. Do you see the lines at the end of this sentence? How many are there? Two. That is right. Now draw two lines on the picture of the girl to show that it goes with that sentence, like this (illustrating with your own copy). (Check to make sure that they have marked it correctly.) Now look at the sentence right under that one. What does it say? Yes, it says

'This is a box.' Can you find the picture of the box? Everybody put your finger on it. How many marks are we going to put on it? That's right, three, because there are three lines after the sentence, 'This is a box.'" (Continue in same fashion through second exercise.) "It is very important to see how many lines follow each sentence and to draw the same number on the right picture. Be very careful about this! Now, turn over the first page. Here are some more pictures and sentences. I want you to read these sentences and mark the pictures just as we did before. Be sure to mark the picture with one line if the sentence is followed by one; with two lines, if the sentence is followed by two; and with three lines, if the sentence is followed by three. As soon as you finish one sentence, go on to the next. I want you to do as many as you can before I say 'STOP.' If one sentence is too hard for you, don't spend too much time on it, but go on to the next one. Do you understand? All right! BEGIN." 5. Inspect the work of each child; give individual instructions when needed. Discourage long delays over difficult problems; tell the pupil to try the next. Watch for failures to mark the pictures according to instructions. 6. Say "Stop" at the end of 15 minutes. Collect papers immediately. Children who failed to follow directions should be retested under supervision. 7. The score is: Number of exercises (that is, the number of pictures) which are correctly marked.

The boy runs. I

The cat runs. II

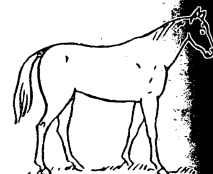
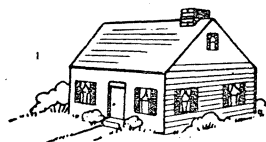
The boy eats. III



This is a ball. I

This is a house. II

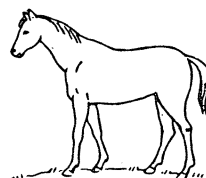
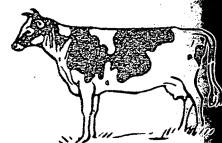
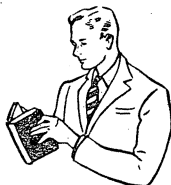
This is a dog. III



This is a hat. I

This is a coat. II

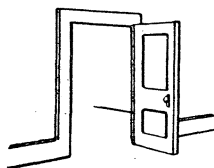
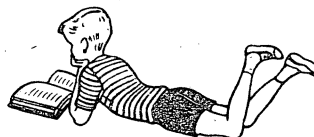
This is a man. III



The door is open. I

The child has a doll. II

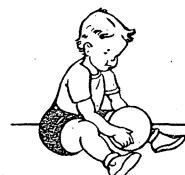
The bird is flying. III



The baby has a box. I

The cow is eating. II

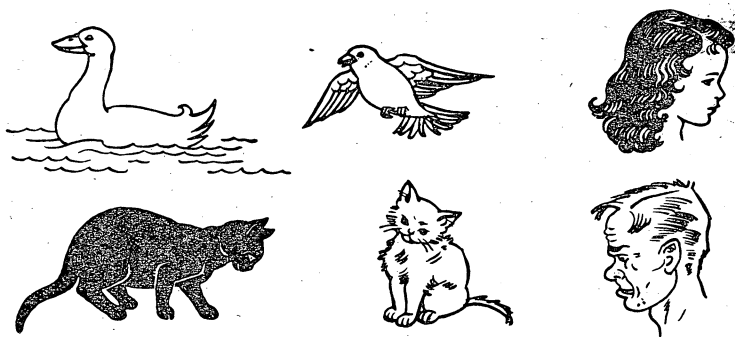
The woman has a dress. III



The duck likes the water. I

The kitten is white. II

The face is pretty. III



Mother is writing a letter. I

This mouse is little. II

The snow is falling. III



The woman has a basket. I

This is a picture of a knife. II

This is a picture of a wagon. III



The teacher has a pencil. I

The children like to skate. II

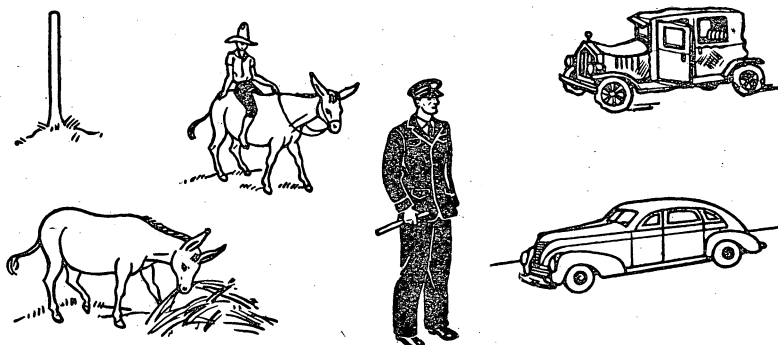
This bottle is full of ink. III



Here is a tall policeman. I

This donkey has some hay. II

This automobile is new. III



This is the office key. I

Here are peaches and
pears. II

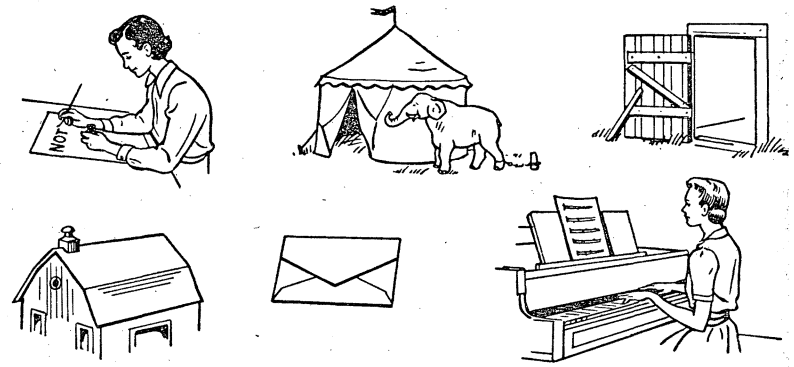
Mother is cleaning some
clothes. III



This is the roof of a barn. I

The teacher makes a
sign. II

The elephant stands near
a tent. III



This is a bottle of poison. I

This picture shows an
ear and an eye. II

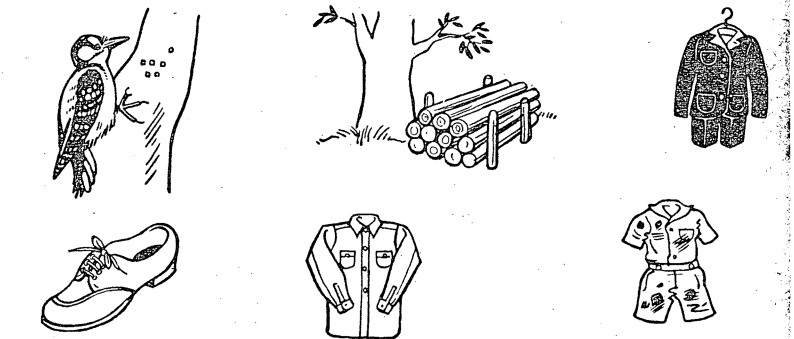
This stove smokes
badly. III



This woodpecker lives in a
big tree. I

This shirt is made of silk. II

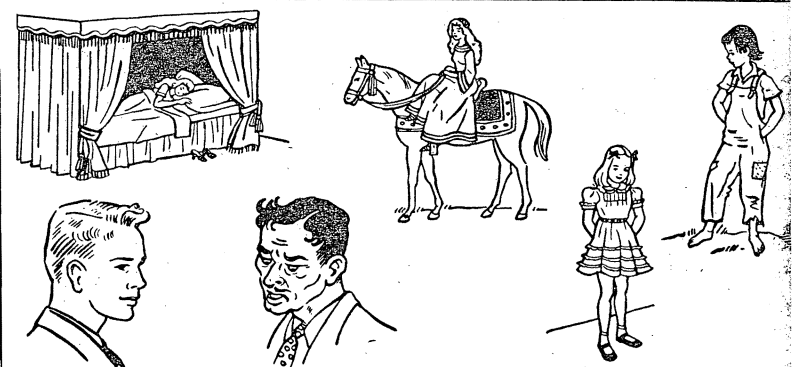
There is dirt on this suit. III



The princess starts on a
journey. I

This is a strong, pleasant
person. II

The young daughter has
pretty clothes. III



GATES PRIMARY READING TESTS

For Grade 1 and Grade 2 (First Half)

Type 3. Paragraph Reading

FORM 1

Write your name here

When is your birthday?..... How old are you?.....

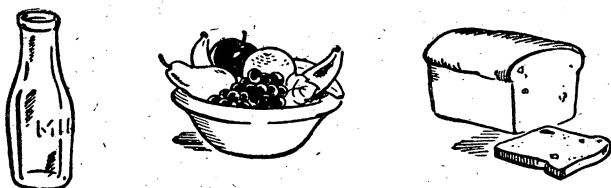
Date School Grade



1. Put an X on the ball.



3. Draw a line under the little book.



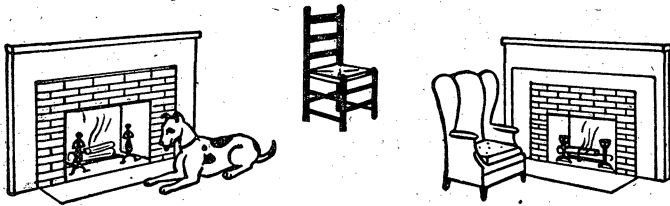
2. Put an X on the milk bottle.



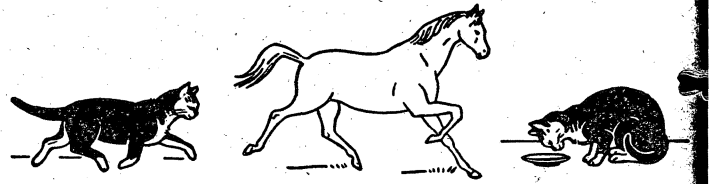
4. Draw a line from the pig to the tree.

To the Examiner: 1. See that each child has a pencil. 2. Distribute papers. 3. Have children fill in blanks at the top of the page. 4. Instructions to children: "We are going to see how well you can read. Do you see the stories and pictures on the front page of your booklet? Everyone look at the first story—up here (illustrating with your own copy). What does it say to do? (Have child answer.) That's right, put an X on the ball. Everyone find the ball and put an X on it. Be sure you put it right on the ball. (Check to see that they all have marked it correctly.) Now look at the box right under that one. What does this story tell you to do? (Have child answer.) That's right, put an X on the milk bottle. Everyone find the milk bottle on your paper and put an X on it. Be sure to put it on the bottle exactly as the story asks you to. (Check to make sure it is done correctly.) Now look at the first box on the next side—up here (illustrating with your own paper). What does the story say to do? (Have pupil answer.) That's right, draw a line under the little book. Be sure you find the little book, and be sure you draw the line under it exactly as the story asks you to. (Check to make sure papers are marked correctly.) Now look at the box under that one. What does this story ask you to do? (Have pupil answer.) That's right, draw a line from the pig to the tree. Do it on your paper. Be sure it goes from the pig to the tree exactly as the

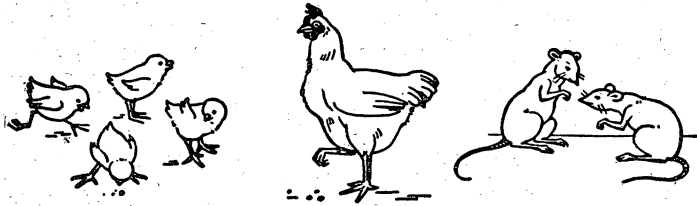
story asks you to. (Check to make sure it is done correctly.) Do not open your books until I tell you to. Now I am going to show you what we are to do next. On the inside of the book are some more pictures and stories. (Examiner holds up a copy of the test showing the inner pages.) You are to do No. 1 (Examiner points to it on his own copy), then go on and do No. 2, then do the next one, and the next one, etc. (Examiner points down first column, then second, etc., and also demonstrates order on all three pages.) As soon as you have finished one story, you must go right ahead and do the next one right below it. Now remember, first, you are to read the story below the picture; then you are to take your pencil and do *exactly* what the story tells you to do. Do you understand? All right. Open your books and BEGIN. Go ahead." 5. Inspect the work of each child; see that each works from top to bottom of columns and that each follows the pages in order. Urge the children individually to try the examples in order but do not tell them the answers. Discourage dawdling over difficult problems; tell them to try the next. 6. The signal STOP is given at the end of 20 minutes. Collect papers immediately. 7. The score is the number of directions which are followed correctly. The mark made must be the one which is specified in "the story" to be correct. For further details with respect to this test see the Manual of Directions.



1. Put an X on the dog.



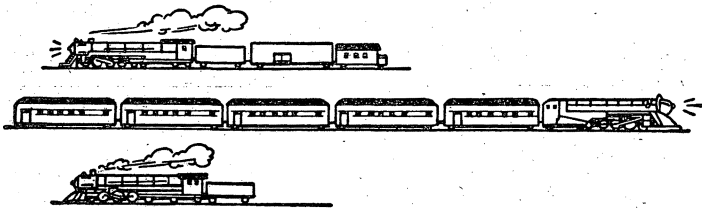
6. Draw a line under the cat that is running.



2. Put an X on the hen.



7. Put an X on one of the rats.



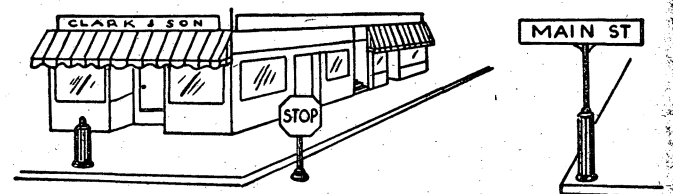
3. Draw a line under the long train.



8. Draw a line under the table the cat sits on.

2 3 2

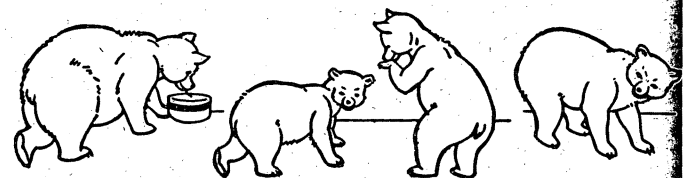
4. Put an X on the big two.



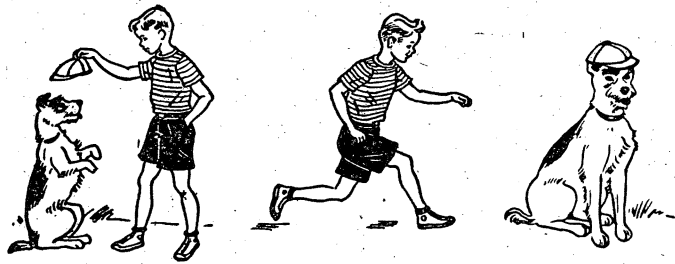
9. Put an X on the name of the street.



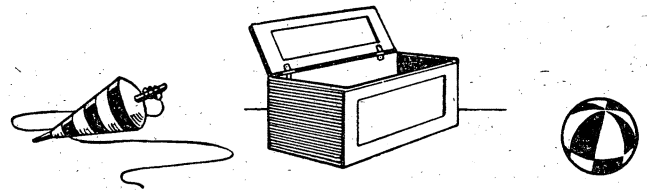
5. Draw a line under the white goat.



10. Draw a line under the fat bear with the dish.



11. Put an X on the boy who is holding his cap over the dog's head.



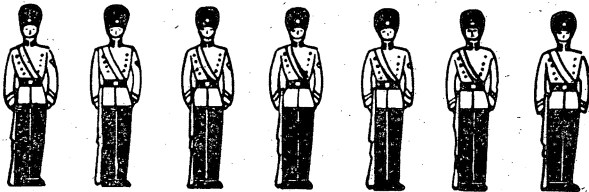
15. The mother told the boy to put his ball in the box. Draw a line from the ball to the box.



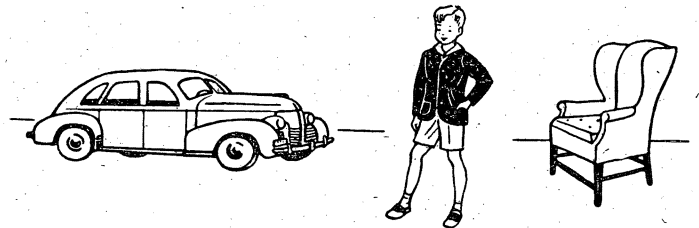
12. One of these three things can tell you the time. Draw a line under it.



16. What would a little child go under if it rained? Put an X on the place where the little child would go.



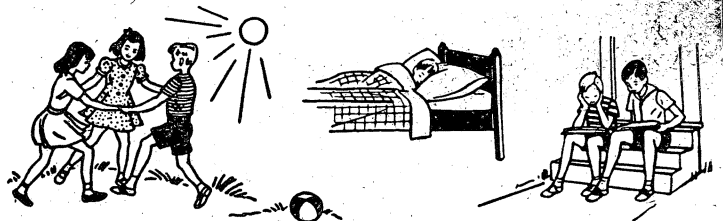
13. Here are seven little soldiers. Draw a line under the feet of four of these soldiers.



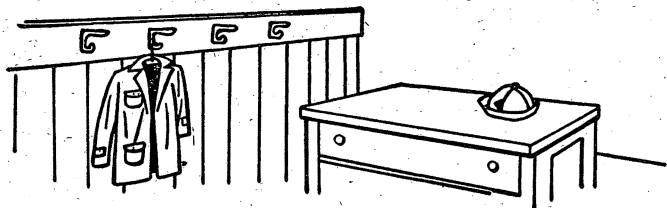
17. A mother told her boy to jump into the car and stay there. Draw a line from the boy to the car.

cat cat eat

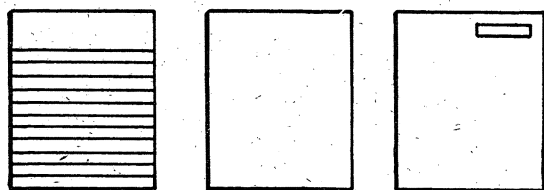
14. Here are three ways of writing "cat." Draw a line under the one you think is poor writing.



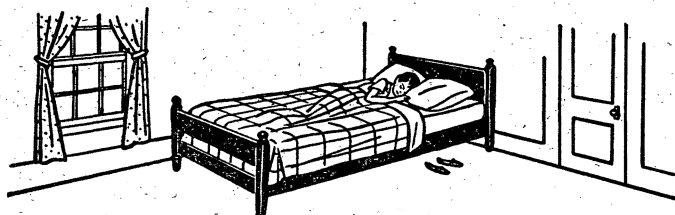
18. Three children are playing a game. They are playing in the sun. Draw a line from one of these children to the ball on the ground.



19. "Put your hat next to the coat," said Mother to the boy. Draw a line from the hat to a hook on the wall where the hat may be hung.



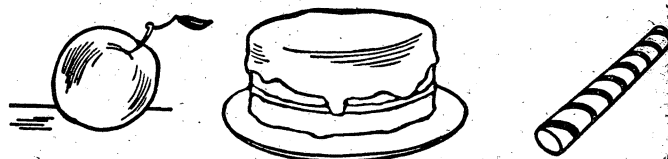
20. A boy was told to write his name on the first line of the paper. Look for the place where his name should be, and put an X on it.



21. Here is a bed in a room. A child sleeps in the bed. The window is closed. It should be open. Put an X on what should be open.



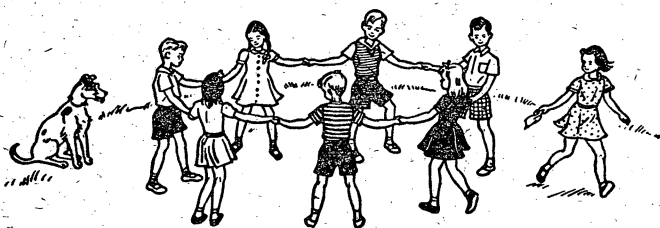
23. Father should have his coat cleaned. He dropped some butter on it when he was eating. Make an X on the store to which he would go to have his coat cleaned.



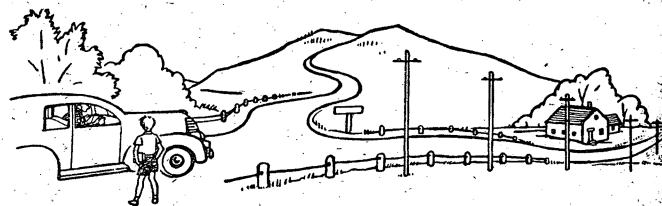
24. A boy had five cents. He went to buy some candy. On the way to the store he saw some big apples. He got an apple. Draw a line under the thing the boy got with his money.



25. You must not cross the street when you see the word, "Stop." You may cross the street when you see the word, "Go." Make an X on the word that tells you it is time to cross the street.



22. The children are playing a game. They hold hands and make a ring. The child who is "it" is out of the ring. Draw a line under the child who is "it."



26. "Which road shall I take?" asked the man. "Take the road that goes by the house," said a boy. "Do not take the road that runs up the hill." Draw a line showing which road the man was told to take.